

chain nodes:

42 44 46 47 48

ring nodes:

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36

chain bonds:

4-48 8-48 14-46 44-46 46-47

ring bonds:

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18 14-15 15-16 16-17 17-18 19-20 19-24 20-21 21-22 22-23 23-24 25-26 25-30 26-27 27-28 28-29 29-30 31-32 31-36 32-33 33-34 34-35 35-36 exact/norm bonds :

4-48 8-48 44-46 46-47

exact bonds:

14-46

normalized bonds:

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18 14-15 15-16 16-17 17-18 19-20 19-24 20-21 21-22 22-23 23-24 25-26 25-30 26-27 27-28 28-29 29-30 31-32 31-36 32-33 33-34 34-35 35-36 isolated ring systems :

containing 1: 7: 13: 19: 25: 31:

G1:[*1],[*2],[*3]

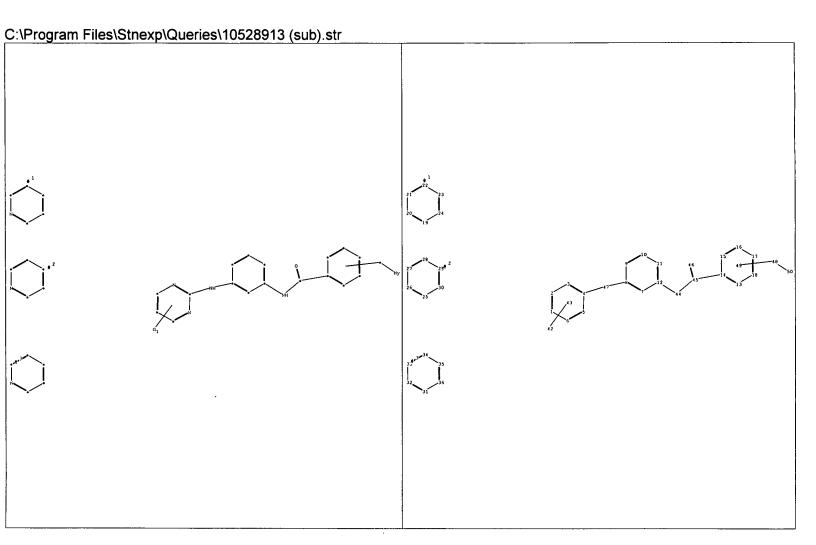
Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom 25:Atom 26:Atom 27:Atom 28:Atom 29:Atom 30:Atom 31:Atom 32:Atom 33:Atom 34:Atom 35:Atom 36:Atom 42:CLAS\$43:Atom 44:CLAS\$45:Atom 46:CLAS\$

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	2025	((544/324) or (514/275)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/10/01 04:18

10/1/2007 4:19:06 AM Page 1



chain nodes:

42 44 45 46 47 48 50

ring nodes:

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36

chain bonds:

4-47 8-47 12-44 14-45 44-45 45-46 48-50

ring bonds:

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18 14-15 15-16 16-17 17-18 19-20 19-24 20-21 21-22 22-23 23-24 25-26 25-30 26-27 27-28 28-29 29-30 31-32 31-36 32-33 33-34 34-35 35-36 exact/norm bonds :

4-47 8-47 12-44 44-45 45-46 48-50

exact bonds:

14-45

normalized bonds:

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18 14-15 15-16 16-17 17-18 19-20 19-24 20-21 21-22 22-23 23-24 25-26 25-30 26-27 27-28 28-29 29-30 31-32 31-36 32-33 33-34 34-35 35-36 isolated ring systems :

containing 1: 7: 13: 19: 25: 31:

G1:[*1],[*2],[*3]

Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom 25:Atom 26:Atom 27:Atom 28:Atom 29:Atom 30:Atom 31:Atom 32:Atom 33:Atom 34:Atom 35:Atom 36:Atom 42:CLASS43:Atom 44:CLASS45:CLASS 46:CLASS

RE.CNT 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

=>

G1:[*1],[*2],[*3]

Match level:

Uploading C:\Program Files\Stnexp\Queries\10528913.str

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chain nodes :
42 44 46 47
ring nodes :
chain bonds :
4-8 14-46 44-46 46-47
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18 14-15 15-16 16-17 17-18 19-20 19-24 20-21 21-22 22-23 23-24 25-26 25-30 26-27 27-28 28-29 29-30 31-32 31-36 32-33 33-34 34-35 35-36
exact/norm bonds :
44-46 46-47
exact bonds :
4-8 14-46
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18 14-15 15-16 16-17 17-18 19-20 19-24 20-21 21-22 22-23 23-24 25-26 25-30 26-27 27-28 28-29 29-30 31-32 31-36 32-33 33-34 34-35 35-36
isolated ring systems :
containing 1 : 7 : 13 : 19 : 25 : 31 :
```

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom

11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom 25:Atom 26:Atom 27:Atom 28:Atom 29:Atom 30:Atom 31:Atom 32:Atom 33:Page 134:Atom 35:Atom 36:Atom 42:CLASS 43:Atom 44:CLASS 45:Atom 46:CLASS 47:CLASS

L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

L1 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

=> s 11 sss sam

SAMPLE SEARCH INITIATED 02:41:49 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 241 TO ITERATE

100.0% PROCESSED 241

241 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 3889 TO 5751

PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=>

Uploading C:\Program Files\Stnexp\Queries\10528913 (a).str

```
chain nodes :
42 44 46 47 48
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36
chain bonds :
4-48 8-48 14-46 44-46 46-47
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18 14-15 15-16 16-17 17-18 19-20 19-24 20-21 21-22 22-23 23-24 25-26 25-30 26-27 27-28 28-29 29-30 31-32 31-36 32-33 33-34 34-35 35-36
exact/norm bonds :
4-48 8-48 44-46 46-47
exact bonds :
14-46
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18 14-15 15-16 16-17 17-18 19-20 19-24 20-21 21-22 22-23 23-24 25-26 25-30 26-27 27-28 28-29 29-30 31-32 31-36 32-33 33-34 34-35 35-36
isolated ring systems :
containing 1 : 7 : 13 : 19 : 25 : 31 :
```

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom 25:Atom 26:Atom 27:Atom 28:Atom 29:Atom 30:Atom 31:Atom 32:Atom 33:Atom 34:Atom 35:Atom 36:Atom 42:CLASS 43:Atom 44:CLASS 45:Atom 46:CLASS 4Page 3S 48:CLASS

G1:[*1],[*2],[*3]

Match level :

L3 STRUCTURE UPLOADED

=> d 13

L3 HAS NO ANSWERS

L3 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

=> s 13 sss sam

SAMPLE SEARCH INITIATED 02:43:25 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 295 TO ITERATE

100.0% PROCESSED 295 ITERATIONS 18 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 4870 TO 6930

PROJECTED ANSWERS: 106 TO 614

L4 18 SEA SSS SAM L3

=> => s 13 sss ful

FULL SEARCH INITIATED 02:49:19 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 6155 TO ITERATE

100.0% PROCESSED 6155 ITERATIONS 460 ANSWERS

SEARCH TIME: 00.00.01

L5 460 SEA SSS FUL L3

=>

Uploading C:\Program Files\Stnexp\Queries\10528913 (sub).str

```
chain nodes :
42 44 45 46 47 48
                             50
ring nodes :
24 25 26 27 28 29 30 31 32 33 34 35 36
chain bonds :
4-47 8-47 12-44 14-45 44-45 45-46 48-50
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18 14-15 15-16 16-17 17-18 19-20 19-24 20-21 21-22 22-23 23-24 25-26 25-30 26-27 27-28 28-29 29-30 31-32 31-36 32-33 33-34 34-35 35-36
exact/norm bonds :
4-47 8-47 12-44 44-45 45-46 48-50
exact bonds :
14-45
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18 14-15 15-16 16-17 17-18 19-20 19-24 20-21 21-22 22-23 23-24 25-26 25-30 26-27 27-28 28-29 29-30 31-32 31-36 32-33 33-34 34-35 35-36
isolated ring systems :
containing 1 : 7 : 13 : 19 : 25 : 31 :
G1:[*1],[*2],[*3]
```

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom 25:Atom 26:Atom 27:Atom 28:Atom 29:Atom 30:Atom 31:Atom 32:Atom 33:Atom 34:Atom 35:Atom 36:Atom 42:CLASS 43:Atom 44:CLASS 45:CLASS 46:CLASS 47:CLASS 48:CLASS 49:Atom 50:Atom

Page 5

Match level:

L6 STRUCTURE UPLOADED

=> d 16

L6 HAS NO ANSWERS

L6 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

=> s 16 sss sub=15 sam

SAMPLE SUBSET SEARCH INITIATED 02:51:06 FILE 'REGISTRY'

SAMPLE SUBSET SCREEN SEARCH COMPLETED - 17 TO ITERATE

100.0% PROCESSED 17 ITERATIONS 9 ANSWERS

SEARCH TIME: 00.00.01

PROJECTIONS (WITHIN SPECIFIED SUBSET): ONLINE **COMPLETE**
PROJECTED ITERATIONS (WITHIN SPECIFIED SUBSET): 93 TO 587
PROJECTED ANSWERS (WITHIN SPECIFIED SUBSET): 9 TO 360

L7 9 SEA SUB=L5 SSS SAM L6

=> => s 16 sss sub=15 ful FULL SUBSET SEARCH INITIATED 02:51:42 FILE 'REGISTRY' FULL SUBSET SCREEN SEARCH COMPLETED - 410 TO ITERATE

100.0% PROCESSED 410 ITERATIONS 194 ANSWERS

SEARCH TIME: 00.00.01

L8 194 SEA SUB=L5 SSS FUL L6

=> s 15 not 18

L9 266 L5 NOT L8

=> => s 19

L10 51 L9

=> d 110 1-51 bib, ab, hitstr

L10 ANSWER 1 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2007:746469 CAPLUS

DN 147:202995

TI Optimization of novel combi-molecules: Identification of balanced and mixed bcr-abl/DNA targeting properties

AU Rachid, Zakaria; Katsoulas, Athanasia; Williams, Christopher; Larroque, Anne-Laure; McNamee, James; Jean-Claude, Bertrand J.

CS Chemical Computing Group Inc., Montreal, C, H3A 2R7, Can.

SO Bioorganic & Medicinal Chemistry Letter (2007), 17(15), 4248-4253 CODEN: BMCLE8; ISSN: 0960-894X

PB Elsevier Ltd.

DT Journal

LA English

AB Steps toward the identification of combi-mols. with strong abl tyrosine kinase (TK) inhibitory property and significant DNA damaging potential are described. The optimized combi-mol. (I) was shown to induce approx. twofold stronger abl TK inhibitory activity than Gleevec and high levels of DNA damage in chronic myelogenous leukemic cells.

IT 623901-01-9P 945028-65-9P

RL: PAC (Pharmacological activity); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (bcr-abl/DNA targeting compds.)

RN 623901-01-9 CAPLUS

CN Benzamide, 4-amino-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 945028-65-9 CAPLUS

CN Benzamide, 4-amino-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-3-(trifluoromethyl)- (CA INDEX NAME)

RN 945028-55-7 CAPLUS

CN Benzamide, 4-[bis(2-chloroethyl)amino]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 945028-58-0 CAPLUS

CN Benzamide, 4-[[bis(2-chloroethyl)amino]methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 945028-59-1 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4-(3-methyl-2-triazen-1-yl)-3-(trifluoromethyl)- (CA INDEX NAME)

IT 623901-04-2P 945028-57-9P 945028-60-4P

945028-61-5P 945028-62-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(bcr-abl/DNA targeting compds.)

RN 623901-04-2 CAPLUS

CN Benzamide, 4-[3-(hydroxymethyl)-3-methyl-1-triazenyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 945028-57-9 CAPLUS

CN Benzamide, 4-[[(2-chloroethyl)methylamino]methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ \text{C1CH}_2-\text{CH}_2-\text{N-CH}_2 & & & \\ & & & \\ \end{array}$$

RN 945028-60-4 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

RN 945028-61-5 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

$$\begin{array}{c|c} Me & \\ HO-CH_2-N-N=N \\ \hline \\ CF_3 \end{array}$$

RN 945028-62-6 CAPLUS

CN Benzamide, 3-chloro-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4-(3-methyl-2-triazen-1-yl)- (CA INDEX NAME)

IT 404844-11-7P 945028-56-8P 945028-63-7P

945028-64-8P 945028-66-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(bcr-abl/DNA targeting compds.)

RN 404844-11-7 CAPLUS

CN Benzamide, 4-(chloromethyl)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 945028-56-8 CAPLUS

CN Benzamide, 4-[[(2-hydroxyethyl)methylamino]methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 945028-63-7 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4-nitro-3-(trifluoromethyl)- (CA INDEX NAME)

RN 945028-64-8 CAPLUS

CN Benzamide, 3-chloro-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4-nitro- (CA INDEX NAME)

$$\begin{array}{c|c} O \\ \hline \\ O_2N \\ \hline \\ C1 \\ \end{array}$$

RN 945028-66-0 CAPLUS

CN Benzamide, 4-amino-3-chloro-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L10 ANSWER 2 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN
- AN 2007:653891 CAPLUS
- DN 147:227100
- TI Local inhibition of liver fibrosis by specific delivery of a platelet-derived growth factor kinase inhibitor to hepatic stellate cells
- AU Gonzalo, Teresa; Beljaars, Leonie; van de Bovenkamp, Marja; Temming, Kai; van Loenen, Anne-Miek; Reker-Smit, Catharina; Meijer, Dirk K. F.; Lacombe, Marie; Opdam, Frank; Keri, Gyoergy; Oerfi, Laszlo; Poelstra, Klaas; Kok, Robbert J.
- CS Department of Pharmacokinetics and Drug Delivery, Groningen University Institute for Drug Exploration, University of Groningen, Neth.
- SO Journal of Pharmacology and Experimental Therapeutics (2007), 321(3), 856-865
 - CODEN: JPETAB; ISSN: 0022-3565
- PB American Society for Pharmacology and Experimental Therapeutics
- DT Journal
- LA English
- AΒ Liver fibrosis is characterized by excessive proliferation and activation of hepatic stellate cells (HSC), a process in which platelet-derived growth factor (PDGF) plays an important role. Inhibition of liver fibrosis via specific delivery of a PDGF kinase inhibitor to HSC might therefore be an attractive strategy. The HSC-selective carrier mannose-6-phosphate modified human serum albumin (M6PHSA) was equipped with a tyrosine kinase inhibitor, 4-chloro-N-[4-methyl-3-(4-pyridin-3-ylpyrimidin-2-ylamino)-phenyl]- benzamide (PAP19) (an imatinib derivative), by means of the platinum-based universal linkage system (ULS). The antifibrotic activity of PAP19-M6PHSA was evaluated in culture-activated rat HSC and precision-cut liver slices from fibrotic rats. After 24-h incubation, both free inhibitor PAP19 and PAP19-M6PHSA showed potent activity, as determined by quant. reverse transcription-polymerase chain reaction anal. of α -smooth muscle actin (α SMA) and procollagen 1a1. Next, we examined the organ distribution and antifibrotic activity of PAP19-M6PHSA in bile duct-ligated (BDL) rats. Male Wistar rats at day 10 after BDL were administered a single dose of PAP19-M6PHSA and sacrificed at 2 h, 1 day, or 2 days afterward. The accumulation of PAP19-M6PHSA in the liver was quantified by high-performance liquid chromatog. anal. (30% of the injected dose at 2 h) and detected in the liver by staining of the carrier. Liver drug levels were sustained at 24 and 48 h after the single dose. Furthermore, PAP19-M6PHSA reduced collagen deposition (Sirius red staining) and αSMA staining of activated HSC at these time points in comparison with saline-treated rats. We therefore conclude that delivery of a PDGF-kinase inhibitor to HSC is a promising technol. to attenuate liver fibrogenesis.
- IT 945493-73-2DP, PAP 19, conjugate with human serum albumin RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 - (local inhibition of liver fibrosis by specific delivery of platelet-derived growth factor kinase inhibitor to hepatic stellate cells)
- RN 945493-73-2 CAPLUS
- CN Benzamide, 4-chloro-N-[4-methyl-3-[[5-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RE.CNT 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 3 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

2007:418588 CAPLUS AN

DN 147:257793

TIPreparation of the imatinib

IN Kompella, Amala; Srinivas, Rachakonda; Rao, Adibhatla Kali Satya Bhujanga; Nannapaneni, Venkaiah Chowdary

PΑ Natco Pharma Limited, India

SO Indian Pat. Appl., 33pp.

CODEN: INXXBQ

DTPatent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI IN 2003MA00462 PRAI IN 2003-MA462	А	(20070209 (20030606)	IN 2003-MA462	20030606

CASREACT 147:257793 A process for the preparation of AΒ title compound I was disclosed. For example, N-alkylation of N-methylpiperazine with benzyl chloride II afforded title compound I in 61% yield. Of note, purification via column chromatog. is

avoided

OS

at all stages in the preparation of title compound I.

ΙT 404844-11-7P

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of the imatinib)

404844-11-7 CAPLUS RN

CN Benzamide, 4-(chloromethyl)-N-[4-methyl-3-[[4-(3-pyridinyl)-2pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

```
L10
      ANSWER 4 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN
ΑN
      2007:150876 CAPLUS
DN
      146:185242
TΙ
      Triflusal-containing polymers for stent coating
      San Roman Del Barrio, Julio; Rodriguez-Crespo, Gema; Fernandez-Gutierrez,
IN
      Mar; Gallardo-Ruiz, Alberto; Duocastella-Codina, Luis; Molina-Crisol,
      Maria
PΑ
      J. Uriach Y Compania S.A., Spain
SO
      PCT Int. Appl., 20pp.
      CODEN: PIXXD2
DT
      Patent
      English
LA
FAN.CNT 1
      PATENT NO.
                              KIND
                                       ATE
                                                    APPLICATION NO.
                                                                               DATE
PΤ
      WO 2007014787
                               Α1
                                      20070208
                                                    WO 2006-EP9156
                                                                               20060920
               AE, AG, AL, AM, AT,
                                      AU, AZ,
                                                ÆA, BB, BG, BR, BW, BY, BZ, CA, CH,
               CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
               GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ,
               UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
          RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
               IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
               GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
               KG, KZ, MD, RU, TJ, TM
      EP 1767552
                                      20070328
                                                   EP 2005-380204
                              Α1
                                                                               20050921
               AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
               IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU
PRAI EP 2005-380204
                              Α
                                      20050921
AB
      New triflusal-containing polymeric compds. resulting from the polymerization of
      2-(methacryloyloxy)ethyl 2-acetyloxy-4-(trifluoromethyl)benzoate with Bu
      acrylate are described. These new polymers exhibit good adhesion and
      crack-bridging properties and are particularly suitable for the coating of
      stents.
ΙT
      152459-94-4, CGP-53716
      RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
         (triflusal-containing polymers for stent coating)
RN
      152459-94-4 CAPLUS
      Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-
CN
      (CA INDEX NAME)
                         Me
```

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 5 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN
ΑN
     2006:1337398 CAPLUS
DN
     146:81891
ΤI
     Process for preparation of isotopically labeled imatinib and intermediates
ΙN
     Salter, Rhys; Rodriguez Perez, Maria Ines; Moenius, Thomas; Voges, Rolf;
     Andres, Hendrik; Bordeaux, Kirk
     Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.
PΑ
     PCT Int. Appl., 36pp.
SO
     CODEN: PIXXD2
DТ
     Patent
     English
LΑ
FAN.CNT 1
     PATENT NO.
                         KIND
                                 DATE
                                            APPLICATION NO.
                                                                    DATE
     ______
PΙ
     WO 2006133904
                          Α2
                                 20061221
                                             WO 2006-EP5676
                                                                    20060613
     WO 2006133904
                          А3
                                20070322
             AE, AG, AL, AM, AT, AU, AZ/
                                         BA, BB, BG, BR, BW, BY, BZ, CA, CH,
                                 DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             CN, CO, CR, CU, CZ,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,
             KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX,
             MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,
             SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
             VN, YU, ZA, ZM, ZW
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             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
PRAI GB 2005-12091
                                20050614
                          Α
OS
     MARPAT 146:81891
AB
     This invention relates to a new process for preparation of isotopically labeled
     imatinib and intermediates. For example, 4-chloromethyl-N-[4-methyl-3-[4-
     (1-oxido-3-pyridinyl)-[2-14C]-pyrimidin-2-ylamino|phenyl|benzamide
     hydrochloride (preparation given) was reacted with 1-methylpiperazine in
     ethanol, followed by the addition of methanesulfonic acid to give
     methanesulfonate of I [X = 14C]. Isotopically labeled intermediates were
     also described.
ΙT
     404844-11-7 917358-62-4 917358-64-6
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (preparation of isotopically labeled imatinib and intermediates)
RN
     404844-11-7 CAPLUS
     Benzamide, 4-(chloromethyl)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-
CN
     pyrimidinyl]amino]phenyl]- (CA INDEX NAME)
               NH.
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C1CH₂

CN Benzamide, 4-(chloromethyl)-N-[4-methyl-3-[[4-(1-oxido-3-pyridinyl)-2-pyrimidinyl-2-14C]amino]phenyl]-, hydrochloride (1:1) (CA INDEX NAME)

Me

● HCl

RN 917358-64-6 CAPLUS

CN Benzamide, 4-(chloromethyl)-N-[4-methyl-3-[[4-(1-oxido-3-pyridinyl)-2-pyrimidinyl-2-14C]amino]phenyl]- (CA INDEX NAME)

L10 ANSWER 6 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN AN2006:1013769 CAPLUS DN 145:356807

Method for preparation of 4-pyridine-3-yl-2-[4-methyl-3-ΤI (benzamido) phenylamino] pyrimidine derivatives and application as pharmaceutical compositions

ΙN Zheng, Shu; Xu, Rongzhen; Chen, Hongxiang

PΑ Hangzhou New Rayjay Biomed Corporation, Peop. Rep. China

SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 19pp. CODEN: CNXXEV

Patent DT

LΑ Chinese

FAN.CNT 1

PATENT NO. KIND APPLICATION NO. DATE _____ -----PΙ CN 1706840 CN 2004-10009181 20040607 PRAI CN 2004-10009181 20040607

CASREACT 145:356807; MARPAT 145:356807

AB The title derivs. have the general formula I (R1 to R7 = H, C1-4 alkyl, lower alkyl substituted by -OH, -COR8, -CN, or -CONH2; R8 = C1-C4 alkyl, cycloalkyl, or cycloalkyl substituted by OH; and X = C1-C4 alkylene, -NHCO-, or -OCO-). Their preparation method comprises reacting 4-chloromethylbenzoyl chloride with 2-(5-aminophenylamino)-4-pyridine-3-ylpyrimidine derivative to obtain N-[3-(4-pyridine-3-yl-pyrimidin-2amino)phenyl]-4-chloromethylbenzamide derivative, then reacting with piperazine to generate title derivative hydrochloride, further reacting with methanesulfonic acid to obtain the final product. The claimed compds. can be used for treating leukemia and tumor, which have remarkable inhibiting effect on the growth of leukocyte in peripheral blood of leukemia patients. The claimed compds. can constitute compns. with pharmaceutically-acceptable adjuvants, and effective amount of one or more other known antileukemia or antitumor medicines for treating leukemia and tumor to reach synergistic effect.

IT 404844-11-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of pyridinyl[methyl(benzamido)phenylamino]pyrimidine derivs. and application for treating leukemia)

RN 404844-11-7 CAPLUS

Benzamide, 4-(chloromethyl)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-CN pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

L10 ANSWER 7 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2006:735123 CAPLUS

DN 146:223251

TI A General Strategy for Creating "Inactive-Conformation" Abl Inhibitors

AU Okram, Barun; Nagle, Advait; Adrian, Francisco J.; Lee, Christian; Ren, Pingda; Wang, Xia; Sim, Taebo; Xie, Yongping; Wang, Xing; Xia, Gang; Spraggon, Glen; Warmuth, Markus; Liu, Yi; Gray, Nathanael S.

CS Department of Chemistry and the Skaggs Institute for Chemical Biology, The Scripps Research Institute, La Jolla, CA, 92037, USA

SO Chemistry & Biology (Cambridge, MA, United States (2006), 13(7), 779-786 CODEN: CBOLE2; ISSN: 1074-5521

PB Cell Press

DT Journal

LA English

AB Summary: Kinase inhibitors that bind to the ATP cleft can be broadly classified into two groups: Those that bind exclusively to the ATP site with the kinase assuming a conformation otherwise conducive to phosphotransfer (type I), and those that exploit a hydrophobic site immediately adjacent to the ATP pocket made accessible by a conformational rearrangement of the activation loop (type II). To date, all type II inhibitors were discovered by using structure-activity-guided optimization strategies. Here, we describe a general pharmacophore model of type II inhibition that enables a rational "hybrid-design" approach whereby a 3-trifluoromethylbenzamide functionality is appended to four distinct type I scaffolds in order to convert them into their corresponding type II counterparts. We demonstrate that the designed compds. function as type II inhibitors by using biochem. and cellular kinase assays and by cocrystallog, with Abl.

IT 879507-24-1P

RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and inhibition of Abl, tyrosine and serine/threonine kinases by inactive-conformation Abl inhibitors)

RN 879507-24-1 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-3-(trifluoromethyl)- (CA INDEX NAME)

RE.CNT 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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T.10
     ANSWER 8 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN
ΑN
     2006:656689 CAPLUS
DN
     145:103728
     A process for preparation of imatinib base
ΤI
     Szczepek, Wojciech; Luniewski, Wojciech; Kaczmarek, Lukasz; Zagrodzki,
ΙN
     Bogdan; Samson-Lazinska, Dorota; Szelejewski, Wieslaw; Skarzynski, Maciej
PA
     Instytut Farmaceutyczny, Pol.
     PCT Int. Appl., 37 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
                                  DATE
     PATENT NO.
                          KIND
                                               APPLICATION NO.
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                                                                       _____
PΙ
     WO 2006071130
                                  20060706
                           A2
                                              WO 2005-PL88
                                                                       20051230
     WO 2006071130
                                  20060928
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             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX,
             MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
              VN, YU, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
              IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
              KG, KZ, MD, RU, TJ, TM
     EP 1833815
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                                              EP 2005-822030
                           A2
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             AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
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             BA, HR, MK, YU
PRAI PL 2004-372016
                           Α
                                  20041230
     PL 2005-376691
                           Α
                                  20050819
     PL 2005-377984
                           Α
                                  20051108
     WO 2005-PL88
                           W
                                  20051230
OS
     CASREACT 145:103728
AΒ
     The invention provides an improved process for preparation of imatinib base and
     its pharmaceutically-acceptable acid addition salts [imatinib is
     pyrimidinyl]amino]phenyl]benzamide]. The process involves reduction of
     N-(5-nitro-2-methylphenyl)-4-(3-pyridinyl)-2-pyrimidinamine (I) using
     hydrazine in the presence of Raney nickel, followed by condensation with
     4-(chloromethyl)benzoyl chloride and then N-methylpiperazine. Compound I
     was obtained by reaction of 1-(2-methyl-5-nitrophenyl)guanidine nitrate
     (prepared from 2-methyl-5-nitroaniline and cyanamide) with
     3-(dimethylamino)-1-(3-pyridinyl)prop-2-en-1-one (prepared from
     3-acetylpyridine and DMF di-Me acetal).
ΙT
     404844-11-7P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (process for preparation of imatinib base)
RN
     404844-11-7 CAPLUS
     Benzamide, 4-(chloromethyl)-N-[4-methyl-3-[4-(3-pyridinyl)-2-
CN
     pyrimidinyl]amino]phenyl]- (CA INDEX NAME)
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L10
      ANSWER 9 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN
      2006:333442 CAPLUS
ΑN
DN
      144:370121
ΤI
      Preparation of pyrimidine derivatives as phosphatase and kinase inhibitors
      for treating a variety of diseases
IN
      Klebl, Bert; Baumann, Matthias; Hoppe, Edmund; Brehmer, Dirk; Daub,
      Henrik; Keri, Gyoergy; Varga, Zoltan; Marosfalvi, Jenoe; Oerfi, Laszlo
PA
      GPC Biotech A.-G., Germany
SO
      PCT Int. Appl., 100 pp.
      CODEN: PIXXD2
DT
      Patent
LA
      English
FAN.CNT 1
                                        ATE
      PATENT NO.
                              KIND
                                                     APPLICATION NO.
                                                                                 DATE
                                                     -----
PΙ
      WO 2006021458
                               A2
                                       20060302
                                                     WO 2005-EP9291
                                                                                 20050829
      WO 2006021458
                               A3
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          RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
      CA 2578122
                                       20060302
                               Α1
                                                  CA 2005-2578122
                                                                                 20050829
      EP 1786781
                               A2
                                       20070523
                                                     EP 2005-785583
                                                                                 20050829
           R:
               AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
                IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL,
                BA, HR, MK, YU
PRAI US 2004-604685P
                               Р
                                       20040827
      WO 2005-EP9291
                               ΤλΤ
                                       20050829
      MARPAT 144:370121
OS.
      The present invention relates to pyrimidine derivs. of general formula I
AB
      (wherein R and R^* = CH3, C2H5, R', R17; R' = H, F, Cl, CN, OCF3, NH2, SH,
      etc.; R17 = H, R', CH3, C2H5, CH=CH2, etc.; Z = NH-CO-R5, CO-NH-R5,
      NH-CS-R5, etc. or a substituted ring or ring system; R5 = H, R4, CH2R3,
      etc. or a substituted ring, e.g., Ph, naphthyl; R3, R4 = H, OH, SH,
      heterocyclic ring, etc.; X = a substituted ring or ring system), methods
      for their synthesis, and the use of said pyrimidine derivs. as
      pharmaceutically active agents, especially for the prophylaxis and/or treatment
      of cell proliferation disorders, cancer, leukemia, erectile dysfunction,
      cardiovascular diseases and disorders, inflammatory diseases, transplant
      rejection, immunol. diseases, neuroimmunol. diseases, autoimmune diseases,
      infective diseases including opportunistic infections, prion diseases
      and/or neuro-degeneration. I are inhibitors of phosphatase and kinase,
      specifically selected from Abl, Akt, c-kit, EGF-R, GSK3b, JNK, Lck,
      PDGF-R, PknG, and ROCK2. Furthermore, the present invention relates to
      pharmaceutical compns. containing at least one pyrimidine derivative and/or
      pharmaceutically acceptable salts thereof as an active ingredient together
      with at least one pharmaceutically acceptable carrier, excipient or
      diluents as well as to methods for prophylaxis and/or treatment of the
      above-mentioned diseases and disorders. For example, II was prepared from
      the appropriate amine and appropriate benzoyl chloride. G315The I that
      were tested were able to inhibit the amount of pathogenic prion protein
      PrPSc in infected cells at concentration between 5 and 20 \mu M. A method for
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detecting prion infections and/or prion diseases in a sample is also claimed, the method comprises administering I to a sample and detecting activity in said sample of the human cellular protein kinase Abl. ΙT 152459-76-2P, 4-Chloro-N-[3-[[4-(pyridin-3-yl)pyrimidin-2yl]amino]phenyl]benzamide 152459-86-4P, 2-Methoxy-N-[3-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide 152459-88-6P , 4-Cyano-N-[3-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide152459-91-1P, 4-Methyl-N-[3-[[4-(pyridin-3-yl)pyrimidin-2yl]amino]phenyl]benzamide 152459-92-2P, 4-Chloro-N-[3-[[4-(pyridin-4-yl)pyrimidin-2-yl]amino]phenyl]benzamide 152459-94-4P , N-[4-Methyl-3-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide152459-96-6P, 4-Methyl-N-[4-methyl-3-[[4-(pyridin-3-yl)pyrimidin-2yl]amino]phenyl]benzamide 152459-98-8P, 4-Chloro-N-[4-methyl-3-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide 152459-99-9P* ** , 2-Methoxy-N-[4-methyl-3-[[4-(pyridin-3-yl)pyrimidin-2yl]amino]phenyl]benzamide ***404844-11-7P, 4-Chloromethyl-N-[4methyl-3-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide 475587-06-5P, 4-Chloromethyl-N-[3-[[4-(pyridin-3-yl)pyrimidin-2-yl)pyrimidin-2-yl)pyrimidin-2-ylyl]amino]phenyl]benzamide 475587-08-7P, 3,4,5-Trimethoxy-N-[3-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide 475587-09-8P, 4-Methoxy-N-[3-[[4-(pyridin-3-yl)pyrimidin-2yl]amino]phenyl]benzamide 475587-12-3P, 3,5-Dimethoxy-N-[3-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide 475587-13-4P , 3,4,5-Trimethoxy-N-[4-methyl-3-[[4-(pyridin-3-yl)pyrimidin-2yl]amino]phenyl]benzamide 475587-14-5P, 4-Cyano-N-[4-methyl-3-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide 475587-15-6P, 4-Methoxy-N-[4-methyl-3-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide 475587-18-9P, 3,5-Dimethoxy-N-[4methyl-3-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide 475587-19-0P, N-[4-Methyl-3-[[4-(pyridin-3-yl)pyrimidin-2-yl)]yl]amino]phenyl]-4-trifluoromethoxybenzamide 475587-25-8P, 3,4,5-Trimethoxy-N-[4-methyl-3-[[4-(pyridin-2-yl)pyrimidin-2yl]amino]phenyl]benzamide 475587-26-9P, 4-Cyano-N-[4-methyl-3-[[4-(pyridin-2-yl)pyrimidin-2-yl]amino]phenyl]benzamide 475587-27-0P, 4-Chloro-N-[4-methyl-3-[[4-(pyridin-2-yl)pyrimidin-2yl]amino]phenyl]benzamide 475587-29-2P, 4-Cyano-N-[4-methyl-3-[[4-(pyridin-4-yl)pyrimidin-2-yl]amino]phenyl]benzamide 475587-31-6P, 4-Methoxy-N-[4-methyl-3-[[4-(pyridin-4-yl)pyrimidin-2-yl]amino]phenyl]benzamide 475587-32-7P, 4-Chloro-N-[4-methyl-3-[[4-(pyridin-4-yl)pyrimidin-2-yl]amino]phenyl]benzamide 475587-34-9P, 3,5-Dimethoxy-N-[3-[[4-(pyridin-4-yl)pyrimidin-2yl]amino]phenyl]benzamide 475587-38-3P, N-[4-Methyl-3-[[4-(pyridin-4-yl)pyrimidin-2-yl]amino]phenyl]-4-trifluoromethoxybenzamide 475587-40-7P, 4-Methoxy-N-[3-[[4-(pyridin-4-yl)pyrimidin-2yl]amino]phenyl]benzamide 475587-41-8P, 4-Cyano-N-[3-[[4-(pyridin-4-yl)pyrimidin-2-yl]amino]phenyl]benzamide 475587-42-9P , 3,4,5-Trimethoxy-N-[3-[[4-(pyridin-4-yl)pyrimidin-2yl]amino]phenyl]benzamide 475587-43-0P, 3,5-Dimethoxy-N-[4methyl-3-[[4-(pyridin-4-yl)pyrimidin-2-yl]amino]phenyl]benzamide 475587-44-1P, 3,4,5-Trimethoxy-N-[4-methyl-3-[[4-(pyridin-4yl)pyrimidin-2-yl]amino]phenyl]benzamide 475587-46-3P, 4-Methoxy-N-[4-methyl-3-[[4-(pyridin-2-yl)pyrimidin-2yl]amino]phenyl]benzamide 475587-47-4P, 3,5-Dimethoxy-N-[4methyl-3-[[4-(pyridin-2-yl)pyrimidin-2-yl]amino]phenyl]benzamide 475587-48-5P, N-[3-[[4-(Pyridin-4-yl)pyrimidin-2yl]amino]phenyl]benzamide 475587-49-6P, 4-Chloro-N-[3-[[4-(pyridin-2-yl)pyrimidin-2-yl]amino]phenyl]benzamide 475587-50-9P 4-Methoxy-N-[3-[[4-(pyridin-2-yl)pyrimidin-2-yl]amino]phenyl]benzamide475587-57-6P, 4-Cyano-N-[3-[[4-(pyridin-2-yl)pyrimidin-2yl]amino]phenyl]benzamide 475587-58-7P, 3,5-Dimethoxy-N-[3-[[4-

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(pyridin-2-yl)pyrimidin-2-yl]amino]phenyl]benzamide 475587-59-8P
, 4-Bromo-N-[3-[[4-(pyridin-2-yl)pyrimidin-2-yl]amino]phenyl]benzamide
475587-60-1P, 4-Methyl-N-[3-[[4-(pyridin-2-yl)pyrimidin-2-
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(pyridin-2-yl)pyrimidin-2-yl]amino]phenyl]benzamide 475587-63-4P
, N-[3-[[4-(Pyridin-2-yl)pyrimidin-2-yl]amino]phenyl]benzamide
475587-64-5P, 4-Chloromethyl-N-[3-[[4-(pyridin-2-yl)pyrimidin-2-yl)pyrimidin-2-yl)pyrimidin-2-yl
yl]amino]phenyl]benzamide 475587-72-5P, 2-Methoxy-N-[3-[[4-
(pyridin-4-yl)pyrimidin-2-yl]amino]phenyl]benzamide 475587-73-6P
, N-[3-[4-(Pyridin-4-yl)pyrimidin-2-yl]amino]phenyl]-4-
trifluoromethoxybenzamide 475587-74-7P, 4-Methyl-N-[3-[[4-
(pyridin-4-yl)pyrimidin-2-yl]amino]phenyl]benzamide 796738-70-0P
, 4-Chloromethyl-N-[4-[[4-(pyridin-3-yl)pyrimidin-2-
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4-Cyano-N-[4-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide
881674-14-2P, 3,4,5-Trimethoxy-N-[4-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide 881674-18-6P, 2-Methoxy-N-[4-[[4-
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, 4-Methyl-N-[4-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide
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, 4-[(4-Methylpiperazin-1-yl)methyl]-N-[4-[[4-(pyridin-3-yl)pyrimidin-2-
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(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide 881674-32-4P
, 3,4,5-Trimethoxy-N-[4-[[4-(pyridin-2-yl)pyrimidin-2-yl)]
yl]amino]phenyl]benzamide 881674-34-6P, N-[4-[[4-(Pyridin-2-
yl)pyrimidin-2-yl]amino]phenyl]-4-trifluoromethoxybenzamide
881674-36-8P, 4-Chloro-N-[4-[[4-(pyridin-2-yl)pyrimidin-2-
(pyridin-2-yl)pyrimidin-2-yl]amino]phenyl]benzamide 881674-40-4P
 4-Methyl-N-[4-[[4-(pyridin-2-yl)pyrimidin-2-yl]amino]phenyl]benzamide
881674-44-8P, N-[4-[[4-(Pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]-
4-trifluoromethoxybenzamide 881674-49-3P, N-[4-[[4-(Pyridin-4-
yl)pyrimidin-2-yl]amino]phenyl]benzamide 881674-53-9P,
4-Methoxy-N-[4-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide
881674-55-1P, 3,5-Dimethoxy-N-[4-[[4-(pyridin-2-yl)pyrimidin-2-yl)]
(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide 881675-55-4P
, 4-[(4-Methylpiperazin-1-yl)methyl]-N-[4-[[4-(pyridin-2-yl)pyrimidin-2-
yl]amino]phenyl]benzamide 881675-87-2P, 3,4,5-Trimethoxy-N-[4-
[[4-(pyridin-4-yl)pyrimidin-2-yl]amino]phenyl]benzamide
881675-89-4P, 2-Methoxy-N-[4-[(4-(pyridin-4-yl))pyrimidin-2-
yl]amino]phenyl]benzamide 881675-95-2P, 4-Chloro-N-[4-[[4-
(pyridin-4-yl)pyrimidin-2-yl]amino]phenyl]benzamide 881676-03-5P
 4-Bromo-N-[4-[[4-(pyridin-4-yl)pyrimidin-2-yl]amino]phenyl]benzamide
881676-05-7P, 2,3,4,5,6-Pentafluoro-N-[4-[[4-(pyridin-4-
yl)pyrimidin-2-yl]amino]phenyl]benzamide 881676-31-9P,
2-Methoxy-N-[4-methyl-3-[[4-(pyridin-4-yl)pyrimidin-2-
yl]amino]phenyl]benzamide 881676-36-4P, N-[4-Methyl-3-[[4-
(pyridin-4-yl)pyrimidin-2-yl]amino]phenyl]benzamide 881676-40-0P
, 4-Methyl-N-[4-methyl-3-[[4-(pyridin-4-yl)pyrimidin-2-
yl]amino]phenyl]benzamide 881677-01-6P, 4-[(4-Methylpiperazin-1-
yl)methyl]-N-[4-[[4-(pyridin-4-yl)pyrimidin-2-yl]amino]phenyl]benzamide
881677-31-2P, 4-Bromo-N-[4-methyl-3-[[4-(pyridin-2-yl)pyrimidin-2-
yl]amino]phenyl]benzamide 881677-35-6P, 4-Methyl-N-[4-methyl-3-
[[4-(pyridin-2-yl)pyrimidin-2-yl]amino]phenyl]benzamide
881677-39-0P, 4-Chloromethyl-N-[4-methyl-3-[[4-(pyridin-2-
yl)pyrimidin-2-yl]amino]phenyl]benzamide 881677-41-4P,
```

2-Methoxy-N-[4-methyl-3-[[4-(pyridin-2-yl)pyrimidin-2-yl]amino]phenyl]benzamide 881677-56-1P, 4-Chloromethyl-N-[3-[[4-(pyridin-4-yl)pyrimidin-2-yl]amino]phenyl]benzamide

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of pyrimidine derivs. as phosphatase and kinase inhibitors for treating a variety of diseases)

RN 152459-76-2 CAPLUS

CN Benzamide, 4-chloro-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 152459-86-4 CAPLUS
CN Benzamide, 2-methoxy-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl](9CI) (CA INDEX NAME)

RN 152459-88-6 CAPLUS
CN Benzamide, 4-cyano-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl](9CI) (CA INDEX NAME)

RN 152459-91-1 CAPLUS
CN Benzamide, 4-methyl-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl](9CI) (CA INDEX NAME)

RN 152459-92-2 CAPLUS

CN Benzamide, 4-chloro-N-[3-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 152459-94-4 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 152459-96-6 CAPLUS

CN Benzamide, 4-methyl-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 152459-98-8 CAPLUS

CN Benzamide, 4-chloro-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 152459-99-9 CAPLUS

CN Benzamide, 2-methoxy-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 404844-11-7 CAPLUS

CN Benzamide, 4-(chloromethyl)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 475587-06-5 CAPLUS

CN Benzamide, 4-(chloromethyl)-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-08-7 CAPLUS

CN Benzamide, 3,4,5-trimethoxy-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-09-8 CAPLUS

CN Benzamide, 4-methoxy-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-12-3 CAPLUS

CN Benzamide, 3,5-dimethoxy-N-[3-[[4-(3-pyridinyl)-2-

pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-13-4 CAPLUS

CN Benzamide, 3,4,5-trimethoxy-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-14-5 CAPLUS

CN Benzamide, 4-cyano-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-15-6 CAPLUS

CN Benzamide, 4-methoxy-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-18-9 CAPLUS

CN Benzamide, 3,5-dimethoxy-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-19-0 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4-(trifluoromethoxy)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & \\ \hline C - NH & NH & N \\ \hline Me & N \end{array}$$

RN 475587-25-8 CAPLUS

CN Benzamide, 3,4,5-trimethoxy-N-[4-methyl-3-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-26-9 CAPLUS

CN Benzamide, 4-cyano-N-[4-methyl-3-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-27-0 CAPLUS

CN Benzamide, 4-chloro-N-[4-methyl-3-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-29-2 CAPLUS

CN Benzamide, 4-cyano-N-[4-methyl-3-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-31-6 CAPLUS

CN Benzamide, 4-methoxy-N-[4-methyl-3-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-32-7 CAPLUS

CN Benzamide, 4-chloro-N-[4-methyl-3-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-34-9 CAPLUS

CN Benzamide, 3,5-dimethoxy-N-[3-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-38-3 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4-(trifluoromethoxy)- (9CI) (CA INDEX NAME)

RN 475587-40-7 CAPLUS

CN Benzamide, 4-methoxy-N-[3-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 475587-41-8 CAPLUS

CN Benzamide, 4-cyano-N-[3-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-42-9 CAPLUS

CN Benzamide, 3,4,5-trimethoxy-N-[3-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-43-0 CAPLUS

CN Benzamide, 3,5-dimethoxy-N-[4-methyl-3-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-44-1 CAPLUS

CN Benzamide, 3,4,5-trimethoxy-N-[4-methyl-3-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-46-3 CAPLUS

CN Benzamide, 4-methoxy-N-[4-methyl-3-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-47-4 CAPLUS

CN Benzamide, 3,5-dimethoxy-N-[4-methyl-3-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-48-5 CAPLUS

CN Benzamide, N-[3-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-49-6 CAPLUS

CN Benzamide, 4-chloro-N-[3-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl](9CI) (CA INDEX NAME)

RN 475587-50-9 CAPLUS

CN Benzamide, 4-methoxy-N-[3-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 475587-57-6 CAPLUS

CN Benzamide, 4-cyano-N-[3-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 475587-58-7 CAPLUS

CN Benzamide, 3,5-dimethoxy-N-[3-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-59-8 CAPLUS

CN Benzamide, 4-bromo-N-[3-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-60-1 CAPLUS

CN Benzamide, 4-methyl-N-[3-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 475587-62-3 CAPLUS

CN Benzamide, 3,5-dichloro-N-[3-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 475587-63-4 CAPLUS

CN Benzamide, N-[3-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-64-5 CAPLUS

CN Benzamide, 4-(chloromethyl)-N-[3-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-72-5 CAPLUS

CN Benzamide, 2-methoxy-N-[3-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 475587-73-6 CAPLUS

CN Benzamide, N-[3-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4-(trifluoromethoxy)- (9CI) (CA INDEX NAME)

RN 475587-74-7 CAPLUS

CN Benzamide, 4-methyl-N-[3-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 796738-70-0 CAPLUS

CN Benzamide, 4-(chloromethyl)-N-[4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 881673-97-8 CAPLUS

CN Benzamide, N-[4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 881674-08-4 CAPLUS

CN Benzamide, 4-cyano-N-[4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 881674-14-2 CAPLUS

CN Benzamide, 3,4,5-trimethoxy-N-[4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 881674-18-6 CAPLUS

CN Benzamide, 2-methoxy-N-[4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 881674-19-7 CAPLUS

CN Benzamide, 4-methyl-N-[4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 881674-23-3 CAPLUS

CN Benzamide, 4-cyano-N-[4-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 881674-24-4 CAPLUS

CN Benzamide, 4-(chloromethyl)-N-[4-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 881674-26-6 CAPLUS

CN Benzamide, 4-[(4-methyl-1-piperazinyl)methyl]-N-[4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 881674-28-8 CAPLUS

CN Benzamide, 4-chloro-N-[4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(CA INDEX NAME)

RN 881674-32-4 CAPLUS

CN Benzamide, 3,4,5-trimethoxy-N-[4-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 881674-34-6 CAPLUS

CN Benzamide, N-[4-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4-(trifluoromethoxy)- (CA INDEX NAME)

RN 881674-36-8 CAPLUS

CN Benzamide, 4-chloro-N-[4-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 881674-38-0 CAPLUS

CN Benzamide, 2-methoxy-N-[4-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(CA INDEX NAME)

RN 881674-40-4 CAPLUS

CN Benzamide, 4-methyl-N-[4-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(CA INDEX NAME)

RN 881674-44-8 CAPLUS

CN Benzamide, N-[4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4-(trifluoromethoxy)- (CA INDEX NAME)

RN 881674-49-3 CAPLUS

CN Benzamide, N-[4-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 881674-53-9 CAPLUS

CN Benzamide, 4-methoxy-N-[4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(CA INDEX NAME)

RN 881674-55-1 CAPLUS

CN Benzamide, 3,5-dimethoxy-N-[4-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 881674-57-3 CAPLUS

CN Benzamide, 3,5-dimethoxy-N-[4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 881675-55-4 CAPLUS

CN Benzamide, 4-[(4-methyl-1-piperazinyl)methyl]-N-[4-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

$$\begin{array}{c} O \\ N \\ N \end{array}$$

RN 881675-87-2 CAPLUS

CN Benzamide, 3,4,5-trimethoxy-N-[4-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 881675-89-4 CAPLUS

CN Benzamide, 2-methoxy-N-[4-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(CA INDEX NAME)

RN 881675-95-2 CAPLUS

CN Benzamide, 4-chloro-N-[4-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 881676-03-5 CAPLUS

CN Benzamide, 4-bromo-N-[4-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(CA INDEX NAME)

RN 881676-05-7 CAPLUS

CN Benzamide, 2,3,4,5,6-pentafluoro-N-[4-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 881676-31-9 CAPLUS

CN Benzamide, 2-methoxy-N-[4-methyl-3-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 881676-36-4 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 881676-40-0 CAPLUS

CN Benzamide, 4-methyl-N-[4-methyl-3-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 881677-01-6 CAPLUS

CN Benzamide, 4-[(4-methyl-1-piperazinyl)methyl]-N-[4-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 881677-31-2 CAPLUS

CN Benzamide, 4-bromo-N-[4-methyl-3-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 881677-35-6 CAPLUS

CN Benzamide, 4-methyl-N-[4-methyl-3-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 881677-39-0 CAPLUS

CN Benzamide, 4-(chloromethyl)-N-[4-methyl-3-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 881677-41-4 CAPLUS

CN Benzamide, 2-methoxy-N-[4-methyl-3-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 881677-56-1 CAPLUS

CN Benzamide, 4-(chloromethyl)-N-[3-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

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L10
     ANSWER 10 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN
ΑN
     2006:235109 CAPLUS
DN
     144:312102
ΤI
     Preparation of (phenylamino)pyrimidine derivatives as inhibitors of
     BCR-ABL kinase for treatment of chronic myeloid leukemia
     Kompella, Amala Kishan; Adibhatla Kali Satya, Bhujanga Rao; Rachakonda,
IN
     Sreenivas; Podili, Khadgapathi; Venkaiah Chowdary, Nannapaneni
PΑ
     Natco Pharma Limited, India
SO
     PCT Int. Appl., 85 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                                  MTE
                          KIND
                                              APPLICATION NO.
                                                                      DATE
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PΙ
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                                 20060316
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                                             WO 2005-IN243
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             NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
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     CA 2591321
                           A1
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                                                                      20050719
     EP 1786799
                           A1
                                 20070523
                                              EP 2005-779775
                                                                      20050719
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                                                                      20070409
PRAI IN 2004-CH908
                           Α
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     WO 2005-IN243
                           W
                                 20050719
     CASREACT 144:312102; MARPAT 144:312102
OS
AΒ
     The present invention relates to preparation of novel (phenylamino)pyrimidine
     derivs. I [wherein X = CH or N; n = 1 or 2; R = H or Me; R' = CF3] or
     pharmaceutically acceptable salts thereof as inhibitors of BCR-ABL kinase
     for the treatment of chronic myeloid leukemia (CML). For example, the
     compound II was prepared in a multi-step synthesis in good yield.
     Pharmaceutical composition containing the novel (phenylamino)pyrimidine
derivs. and
     processes for their prepn were also presented. Since the IC50 values of
     these mols. are in the range of 0.1 to 10.0 nm, these novel compds. are
     potentially useful for the treatment of CML.
ΙT
     879507-24-1P 879507-25-2P 879507-26-3P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (drug candidate; preparation of (phenylamino)pyrimidine derivs. as
        inhibitors of BCR-ABL kinase for treatment of chronic myeloid leukemia)
RN
     879507-24-1 CAPLUS
     Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-3-
CN
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(trifluoromethyl) - (CA INDEX NAME)

RN 879507-25-2 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-3,5-bis(trifluoromethyl)- (CA INDEX NAME)

RN 879507-26-3 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-2-(trifluoromethyl)- (CA INDEX NAME)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/528,913

ANSWER 11 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN L10 2006:176834 CAPLUS AN DN 144:370108 ΤI Preparation and application of phenylamino pyrimidine derivatives ΙN Chen, Guoging PΑ Chen Guoqing, Peop. Rep. China SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 41 pp. CODEN: CNXXEV DT Patent LA Chinese FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE ------PΙ CN 1560050 Α 20050105 CN 2004-10014093 20040218 PRAI CN 2004-10014093 20040218 OS MARPAT 144:370108 The invention relates to a phenylamino pyrimidine derivative, its preparing AΒ process, medicines adopting it as active component, a method of curing the diseases relative to tyrosine kinase, especially to Bcr-Abl, like cancers, etc, and the application of its acting as medicine and making tyrosine kinase inhibition medicines to relieve the effect of tyrosine kinase to endotherms like human beings. ΙT 791609-55-7P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and application of phenylamino pyrimidine derivs.) RN 791609-55-7 CAPLUS CNBenzamide, 4-hydroxy-N-[4-methyl-3-[[4-(3-pyridinyl)-2pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

$$\begin{array}{c|c} O \\ \hline \\ C-NH \\ \hline \\ Me \end{array}$$

RN 791609-58-0 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4-[(1-methyl-3-pyrrolidinyl)amino]- (CA INDEX NAME)

RN 791609-62-6 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4- [(1-methyl-2-pyrrolidinyl)methoxy]- (CA INDEX NAME)

RN 791609-63-7 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4-(3-pyrrolidinylamino)- (CA INDEX NAME)

RN 791609-65-9 CAPLUS

CN Benzamide, 4-(aminofluoromethyl)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

$$\begin{array}{c|c} O \\ \hline C \\ NH \\ \hline \end{array}$$

RN 791609-67-1 CAPLUS

CN Benzamide, 4-(aminodifluoromethyl)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & \circ & \\ \hline & C - NH \\ \hline & Me \\ \end{array}$$

RN 791609-68-2 CAPLUS

CN Benzamide, 4-[methyl(1-methyl-3-pyrrolidinyl)amino]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 791609-69-3 CAPLUS

CN Benzamide, 4-[fluoro[(1-methyl-3-pyrrolidinyl)amino]methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

RN 791609-71-7 CAPLUS

CN Benzamide, 4-[[[2-(dimethylamino)ethyl]amino]fluoromethyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 791609-74-0 CAPLUS

CN Benzamide, 4-[[[2-(dimethylamino)ethyl]amino]difluoromethyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 791609-75-1 CAPLUS

CN Benzamide, 4-[fluoro[methyl(1-methyl-3-pyrrolidinyl)amino]methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

PAGE 2-A

RN 791609-76-2 CAPLUS

CN Benzamide, 4-[fluoro(3-pyrrolidinylamino)methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

PAGE 2-A

Me

RN

791609-79-5 CAPLUS
Benzamide, 4-[difluoro[methyl(1-methyl-3-pyrrolidinyl)amino]methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME) CN

PAGE 2-A

RN 791609-81-9 CAPLUS

CN Benzamide, 4-[difluoro(3-pyrrolidinylamino)methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

PAGE 2-A

RN 791609-82-0 CAPLUS

CN Benzamide, 4-[[methyl(1-methyl-3-pyrrolidinyl)amino]methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

Ме

PAGE 2-A

RN 791609-84-2 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4[[(1-methyl-3-pyrrolidinyl)amino]methyl]- (CA INDEX NAME)

PAGE 2-A

RN 791609-85-3 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4-[(3-pyrrolidinylamino)methyl]- (CA INDEX NAME)

PAGE 2-A

Ие

RN 882166-62-3 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4-(methyl-3-pyrrolidinylamino)- (CA INDEX NAME)

RN 882166-63-4 CAPLUS

CN Benzamide, 4-[fluoro(methyl-3-pyrrolidinylamino)methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

| Me

RN 882166-64-5 CAPLUS

CN Benzamide, 4-[difluoro(methyl-3-pyrrolidinylamino)methyl]-N-[4-methyl-3-[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

l Me

RN 882166-67-8 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4[(methyl-3-pyrrolidinylamino)methyl]- (CA INDEX NAME)

| Me PAGE 2-A

L10 ANSWER 12 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2005:1068885 CAPLUS

DN 143:338914

TI Metabolism and disposition of imatinib mesylate in healthy volunteers

AU Gschwind, Hans-Peter; Pfaar, Ulrike; Waldmeier, Felix; Zollinger, Markus; Sayer, Claudia; Zbinden, Peter; Hayes, Michael; Pokorny, Rolf; Seiberling, Michael; Ben-Am, Monique; Peng, Bin-Gross, Gerhard

CS Exploratory Development/Drug Metabolish & Pharmacokinetics, Novartis Pharma AG, Basel, Switz.

SO Drug Metabolism and Disposition (2005), 33(10), 1503-1512 CODEN: DMDSAI; ISSN: 0090-9556

PB American Society for Pharmacology and Experimental Therapeutics

DT Journal

LA English

AΒ Imatinib mesylate (GLEEVEC, GLIVEC, formerly STI571) has demonstrated unprecedented efficacy as first-line therapy for treatment for all phases of chronic myelogenous leukemia and metastatic and unresectable malignant gastrointestinal stromal tumors. Disposition and biotransformation of imatinib were studied in four male healthy volunteers after a single oral dose of 239 mg of 14C-labeled imatinib mesylate. Biol. fluids were analyzed for total radioactivity, imatinib, and its main metabolite CGP74588. Metabolite patterns were determined by radio-high-performance liquid chromatog. with off-line microplate solid scintillation counting and characterized by liquid chromatog.-mass spectrometry. Imatinib treatment was well tolerated without serious adverse events. Absorption was rapid (tmax 1-2 h) and complete with imatinib as the major radioactive compound in plasma. Maximum plasma concns. were 0.921±0.095 µg/mL (mean ± S.D., n = 4) for imatinib and $0.115 \pm 0.026 \, \mu \text{g/mL}$ for the pharmacol. active N-desmethyl metabolite (CGP74588). Mean plasma terminal elimination half-lives were 13.5 ± 0.9 h for imatinib, 20.6 ± 1.7 h for CGP74588, and 57.3±12.5 h for 14C radioactivity. Imatinib was predominantly cleared through oxidative metabolism Approx. 65 and 9% of total systemic exposure [AUCO-24 h (area under the concentration time curve) of radioactivity] corresponded to imatinib and CGP74588, resp. The remaining proportion corresponded mainly to oxidized derivs. of imatinib and CGP74588. Imatinib and its metabolites were excreted predominantly via the biliary-fecal route. Excretion of radioactivity was slow with a mean radiocarbon recovery of 80% within 7 days (67% in feces, 13% in urine). Approx. 28 and 13% of the dose in the excreta corresponded to imatinib and CGP74588, resp.

IT 865487-51-0

RL: BSU (Biological study, unclassified); BIOL (Biological study) (metabolism and disposition of imatinib mesylate in healthy volunteers)

RN 865487-51-0 CAPLUS

CN Benzoic acid, 4-[[[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]amino]carbonyl]- (CA INDEX NAME)

RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/528,913

L10 ANSWER 13 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

AN2005:982360 CAPLUS

DN 143:281777

Photosensitizer-kinase modulator conjugates for the treatment of protein TI kinase-dependent diseases

ΙN Bourre, Ludovic

PAFr.

SO Fr. Demande, 26 pp. CODEN: FRXXBL

DTPatent

LA French

FAN.CNT 1

PATENT NO. KIND APPLICATION NO. DATE FR 2867189 Α1 20050909 FR 2004-2408 20040308 PRAI FR 2004-2408 20040308

The invention discloses compds. modulating protein kinase activity, as well as drugs and pharmace tical compns. for the treatment of diseases dependent on protein kinase activity. The compds. are conjugates of ≥ 1 photoactive mols. and ≥ 1 protein kinase modulators. The

compds. are useful for photochemotherapy. Compound preparation is included. IT

863994-25-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(photosensitizer-kinase modulator conjugates for treatment of protein kinase-dependent diseases)

RN 863994-25-6 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4-[7,12,17-tris(4-methylphenyl)-21,22,23,24-tetraazapentacyclo[16.2.1.13,6.1 8,11.113,16]tetracosa-1,3(24),4,6,8,10,12,14,16(22),17,19-undecaen-2-yl]-(9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L10
     ANSWER 14 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN
ΑN
     2005:638614 CAPLUS
DN
     143:149136
ΤI
     Protection of tissues and cells from cytotoxic effects of ionizing
     radiation by ABL inhibitors
ΙN
     Reddy, E. Premkumar; Reddy, M. V. Ramana; Cosenza, Stephen C.; Gumireddy,
     Kiranmai
     Temple University of the Commonwealth System of Higher Education, USA
PA
     PCT Int. Appl., 151 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                          KIND
                                              APPLICATION NO.
                                                                      DATE
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PΙ
     WO 2005065074
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                                                                      20040902
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              NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL,
              TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
                                                                            2W
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
                                                                            AM.
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                                  CF,
                                       ÆG,
                                          CI, CM, GA, GN, GQ, GW, ML, MR, NE,
              SN, TD, TG
                                  20,630909
PRAI US 2003-501783P
OS
     MARPAT 143:149136
AΒ
     Pre-treatment with ABL protein kinase inhibitors protects normal cells
     from the toxic side effects of ionizing radiation. Administration of one
     or more radioprotectant to a patient prior to anticancer radiotherapy
     reduces the cytotoxic side effects of the radiation on normal cells.
     radioprotective effect allows for safely increasing the dosage of
     anticancer radiation. Amelioration of toxicity following inadvertent
     radiation exposure may also be mitigated.
TT
     152459-77-3 152459-82-0 152459-86-4
     152459-87-5 152459-88-6 152459-91-1
     152459-94-4 152459-96-6 152459-98-8
     152459-99-9
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (ABL protein kinase inhibitors as radioprotectants)
RN
     152459-77-3 CAPLUS
CN
     Benzamide, N-[3-[4-(3-pyridiny1)-2-pyrimidiny1]amino[pheny1]-(9CI)
     INDEX NAME)
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RN 152459-82-0 CAPLUS

CN Benzoic acid, 2-[[[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]amino]carbonyl]- (9CI) (CA INDEX NAME)

RN 152459-86-4 CAPLUS

CN Benzamide, 2-methoxy-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 152459-87-5 CAPLUS

CN Benzamide, 4-fluoro-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 152459-88-6 CAPLUS

CN Benzamide, 4-cyano-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 152459-91-1 CAPLUS

CN Benzamide, 4-methyl-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 152459-94-4 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 152459-96-6 CAPLUS

CN Benzamide, 4-methyl-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 152459-98-8 CAPLUS

CN Benzamide, 4-chloro-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 152459-99-9 CAPLUS

CN Benzamide, 2-methoxy-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

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L10
        ANSWER 15 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN
AN
         2005:614536 CAPLUS
DN
         143:115392
ΤI
         Preparation of conjugated small molecules for diagnostic and therapeutic
IN
         Grotzfeld, Robert M.; Milanov, Zdravko V.; Patel, Hitesh K.; Lai, Andiliy
         G.; Mehta, Shamal A.; Lockhart, David J.
PΑ
         Ambit Biosciences Corp., USA
         U.S. Pat. Appl. Publ., 63 pp.
SO.
         CODEN: USXXCO
DT
         Patent
LA
         English
FAN.CNT 1
         PATENT NO.
                                             KIND
                                                          DATE
                                                                               APPLICATION NO.
                                                                                                                         DATE
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                                                                                ----
                                             ----
PΙ
         US 2005153371
                                               A1
                                                          20050714
                                                                               US 2005-31638
                                                                                                                         20050107
                                                                               AU 2005-204428
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                                               Α1
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                                                                                                                         20050107
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         EP 1711825
                                                                               EP 2005-705221
                                               A2
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                                                                                                                         20050107
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         JP 2007521338
                                               Τ
                                                          20070802
                                                                               JP 2006-549423
PRAI US 2004-535173P
                                               Ρ
                                                          20040107
         US 2004-557941P
                                               Ρ
                                                          20040330
         WO 2005-US456
                                               W
                                                          20050107
AΒ
         Provided herein are linker compds. and conjugates that include the linker
         compds. In one embodiment, the linker compds. comprise 2 or 3 residues of
         6-aminohexanoic acid and optionally 7-10 residues of polyethyleneglycol
         (PEG). The linker compds. are useful in forming conjugates with one or
        more components useful in biopharmaceutical or bioanal. applications. In
         particular, the biopharmaceutically useful compds. are kinase inhibitors.
         The conjugates described herein have utility in a variety of diagnostic,
         separation, and therapeutic applications. Thus, I was prepared from SB 202190,
         PEG-azide and the biotin-linker compound
IT
         857892-09-2P
         RL: DGN (Diagnostic use); PAC (Pharmacological activity); SPN (Synthetic
         preparation); THU (Therapeutic use); BIOL (Biological study); PREP
         (Preparation); USES (Uses)
               (preparation of conjugated biotins for diagnostic and therapeutic use)
RN
         857892-09-2 CAPLUS
CN
         1,4-Benzenedicarboxamide, N-[49-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-
         thieno[3,4-d]imidazol-4-y1]-31,38,45-trioxo-3,6,9,12,15,18,21,24,27-
         nonaoxa-30,37,44-triazan \bar{o}natetracont-1-yl]-N'-[4-methyl-3-[[4-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-3-(3-methyl-
         pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)
```

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

PAGE 1-C



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L10
     ANSWER 16 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN
     2005:612254 CAPLUS
ΑN
DN
     143:133396
TI
     Preparation of heterocyclyl moiety-containing amides as BCR-ABL tyrosine
     kinase inhibitors
IN
     Asaki, Tetsuo; Sugiyama, Yukiteru; Segawa, Jun
PA
     Nippon Shinyaku Co., Ltd., Japan
SO
     POT Int. Appl., 168 pp.
     CODEN: \PIXXD2
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                                                                    20060622
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                          Α
                                 20070706
                                                                    20060626
PRAI JP 2003-431398
                          Α
                                 20031225
     WO 2004-JP19553
                          W
                                 20041227
     MARPAT 143:133396
OS
     The title compds. I (R1 represents CH2R11 (R11 represents a nitrogenous
AB
     saturated heterocyclic group), etc.; R2 represents alkyl, halogeno, haloalkyl,
     etc.; R3 represents hydrogen, halogeno, alkoxy; Het1 represents Q1, etc.;
     and Het2 represents pyrimidinyl, etc.) are prepared Thus
     3-difluoromethyl-4-(4-methylpiperazin-1-ylmethyl)-N-[4-methyl-3-[4-(5-
     pyrimidinyl)pyrimidin-2-ylamino]phenyl]benzamide was prepared from
     4-methyl-3-[4-(5-pyrimidinyl)pyrimidin-2-ylamino]aniline and
     3-difluoromethyl-4-(4-methylpiperazin-1-ylmethyl)benzoyl chloride HCl
     salt. In an assay (for cell proliferation inhibiting activity) using K562
     cells, compds. of this invention showed IC50 values of < 0.00001 \mu M to
     0.001 \mu M. Formulations are given.
     859212-54-7P 859212-55-8P
TT
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (preparation of heterocyclyl moiety-containing amides as BCR-ABL tyrosine
kinase
        inhibitors)
     859212-54-7 CAPLUS
RN
     Benzamide, 4-[(1-methyl-4-piperidinyl)oxy]-N-[4-methyl-3-[[4-(3-pyridinyl)-
CN
     2-pyrimidinyl]amino]phenyl]-3-(trifluoromethyl)- (CA INDEX NAME)
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RN 859212-55-8 CAPLUS

CN Benzamide, 4-[(1-methyl-4-piperidinylidene)methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-3-(trifluoromethyl)- (CA INDEX NAME)

IT 641615-11-4P 641615-12-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

 $\hbox{ (preparation of heterocyclyl moiety-containing amides as BCR-ABL tyrosine kinase}$

inhibitors)

RN 641615-11-4 CAPLUS

CN Benzamide, 3-bromo-4-[(dimethylamino)methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 641615-12-5 CAPLUS

CN Benzamide, 3-bromo-4-[(diethylamino)methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD

L10 ANSWER 17 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2005:366660 CAPLUS

DN 143:126017

TI Engineering 3-alkyltriazenes to block bcr-abl kinase: a novel strategy for the therapy of advanced bcr-abl expressing leukemias

AU Katsoulas, Athanasia; Rachid, Zakaria; Brahimi, Fouad; McNamee, James; Jean-Claude, Bertrand J.

CS Cancer Drug Research Laboratory, Department of Medicine, Division of Medical Oncology, McGill University Health Center/Royal Victoria Hospital, Montreal, QC, H3A 1A1, Can.

SO Leukemia Resear (h (2005), 29(6), 693-700 CODEN: LEREDD; USSN: 0148-2126

PB Elsevier B.V.

DT Journal

LA English

Recently, within the framework of a new strategy termed "combi-targeting," AΒ we designed ZRCM5 to contain a 2-phenylaminopyrimidopyridine moiety targeted to bcr-abl kinase and a triazene tail capable of generating a methyldiazonium species upon hydrolysis. The ability of ZRCM5 to block tyrosine kinase activity was tested in a short 10 min exposure ELISA involving isolated bcr-abl kinase and Western blotting assays. The results showed that: (a) ZRCM5 was hydrolyzed with a half-life of 27 min in cell culture media, (b) it blocked bcr-abl autophosphorylation in promyeloblastic leukemia K562 cells in a dose-dependent manner (IC50 = $14.01~\mu\text{M})$ and (c) it induced dose-dependent levels of DNA strand breaks. In contrast, temozolomide (TEM), a clin. DNA damaging triazene capable of generating, like ZRCM5, a methyldiazonium species, could neither block bcr-abl tyrosine kinase activity in isolated enzyme nor in whole cell autophosphorylation assays. In cells expressing varied levels of bcr-abl, ZRCM5 was consistently more potent than TEM. The significant potency of ZRCM5 against the leukemia cells was attributed to its ability to simultaneously to block bcr-abl and related DNA repair activity while inducing significant DNA lesions in bcr-abl expressing leukemia cells. Further studies are ongoing to increase the affinity of ZRCM5 with the purpose of further enhancing its potency in bcr-abl expressing cells.

IT 623901-04-2

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(ZRCM5 blocked bcr-abl kinase autophosphorylation, induced DNA strand breaks by dose dependent manner and also induced apoptosis,

cytotoxicity in advanced bcr-abl expressing leukemia K562 cells)

RN 623901-04-2 CAPLUS

CN Benzamide, 4-[3-(hydroxymethyl)-3-methyl-1-triazenyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} Me & \\ HO-CH_2-N-N=N \end{array}$$

RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 18 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN
1.10
     2004:1124644 CAPLUS
AN
DN
     142:74589
TT
     2-Aminopyrimidine derivatives as Raf kinase inhibitors, process for their
     preparation, and their use, e.g., in the treatment of proliferative
     diseases such as cancer
IN
     Batt, David Bryant; Ramsey, Timothy Michael; Sabio, Michael Lloyd
PΑ
     Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.
SO
     PCT Int. Appl., 69 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
                                            APPLICATION NO.
     PATENT NO.
                          KIND
                                  DATE
     _____
                                             -----
                                  _____
PΙ
     WO 2004110452
                           A1
                                  20041223
                                             WO 2004-EP6317
                                                                       20040611
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
              TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
              SN, TD, TG
     AU 2004246800
                           Α1
                                  20041223
                                              AU 2004-246800
                                                                       20040611
     CA 2529090
                           Α1
                                  20041223
                                               CA 2004-2529090
                                                                       20040611
     EP 1635835
                           Α1
                                  20060322
                                               EP 2004-739809
                                                                       20040611
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK
     CN 1805748
                                  20060719
                                              CN 2004-80016328
                           Α
                                                                       20040611
     BR 2004011365
                           Α
                                  20060725
                                               BR 2004-11365
                                                                       20040611
     JP 2006527230
                           T
                                  20061130
                                               JP 2006-515898
                                                                       20040611
     US 2006293340
                                  20061228
                                              US 2004-560352
                           A1
                                                                       20040611
     MX 2005PA13349
                           Α
                                  20060309
                                              MX 2005-PA13349
                                                                       20051208
     IN 2005CN03360
                           Α
                                  20070914
                                               IN 2005-CN3360
                                                                       20051212
PRAI US 2003-478709P
                           Ρ
                                  20030613
     WO 2004-EP6317
                           W
                                  20040611
OS
     MARPAT 142:74589
     The application discloses compds. that inhibit Raf kinase, having formula
AΒ
     I [wherein R1 is an (un)substituted Ph or heteroaryl radical; and R2 is an
     (un) substituted Ph radical; or an N-oxide or pharmaceutically acceptable
     salt thereof]. Also disclosed are methods of treating diseases
     characterized by excessive signaling through the MAP kinase pathway by
     administering a RAF kinase-inhibiting amount of a compound I. In particular,
     I are useful for the treatment of proliferative diseases such as cancer.
     Over 30 compds. I were prepared For instance, amidation of
     4-methyl-N3-[4-(pyrazin-2-yl)pyrimidin-2-yl]benzene-1,3-diamine with
     3-CF3C6H4CO2H using BOP reagent and DIEA in DMF gave invention compound II.
     The prepared compds. I inhibited human Raf proteins as follows (IC50):
     wild-type C-Raf 0-01-0.7 µM; wild-type B-Raf 0.04-1.5 µM; and mutant
     B-Raf (V599E) 0.006-1.6 \mu M.
     812699-95-9P, N-[3-[[4-(6-Chloropyridin-3-yl)pyrimidin-2-yl]amino]-
IT
     4-methylphenyl]-3-(trifluoromethyl)benzamide
     RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
     preparation); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); RACT (Reactant or reagent); USES (Uses)
         (drug candidate; preparation of aminopyrimidine derivs. as Raf kinase
```

inhibitors for treatment of proliferative diseases such as cancer)
RN 812699-95-9 CAPLUS
CN Benzamide, N-[3-[[4-(6-chloro-3-pyridinyl)-2-pyrimidinyl]amino]-4methylphenyl]-3-(trifluoromethyl)- (CA INDEX NAME)

ΙT 812699-92-6P, N-[4-Methyl-3-[[4-[6-[[3-(morpholin-4yl)propyl]amino]pyridin-3-yl]pyrimidin-2-yl]amino]phenyl]-3-(trifluoromethyl) benzamide 812699-93-7P, N-[4-Methyl-3-[[4-[6-(pyridin-4-ylamino)pyridin-3-yl]pyrimidin-2-yl]amino]phenyl]-3-(trifluoromethyl)benzamide 812699-94-8P, 3-(Difluoromethoxy)-N-[3-[[4-[6-[(2-hydroxyethyl)amino]pyridin-3-yl]pyrimidin-2-yl]amino]-4methylphenyl]benzamide 812699-96-0P, N-[3-[[4-[6-(Dimethylamino)pyridin-3-yl]pyrimidin-2-yl]amino]-4-methylphenyl]-3-(trifluoromethyl)benzamide 812699-97-1P, N-[3-[[4-[6-(2-Methoxyethoxy)pyridin-3-yl]pyrimidin-2-yl]amino]-4-methylphenyl]-3-(trifluoromethyl)benzamide 812699-99-3P, N-[4-Methyl-3-[[4-[6-(4methylpiperazin-1-yl)pyridin-3-yl]pyrimidin-2-yl]amino]phenyl]-3-(trifluoromethyl) benzamide 812700-01-9P, N-[4-Methyl-3-[[4-[6-(methylamino)pyridin-3-yl]pyrimidin-2-yl]amino]phenyl]-3-(trifluoromethyl)benzamide 812700-03-1P, N-[3-[[4-[6-(Cyclopropylamino)pyridin-3-yl]pyrimidin-2-yl]amino]-4-methylphenyl]-3-(trifluoromethyl)benzamide 812700-05-3P, N-[3-[[4-[6-(Cyclopentylamino)pyridin-3-yl]pyrimidin-2-yl]amino]-4-methylphenyl]-3-(trifluoromethyl) benzamide 812700-07-5P, N-[4-Methyl-3-[[4-[6-(thiomorpholin-4-yl)pyridin-3-yl]pyrimidin-2-yl]amino]phenyl]-3-(trifluoromethyl) benzamide 812700-08-6P, N-[4-Methyl-3-[[4-[6-(morpholin-4-yl)pyridin-3-yl]pyrimidin-2-yl]amino]phenyl]-3-(trifluoromethyl)benzamide 812700-09-7P, N-[3-[[4-(4-Hydroxy-3,4,5,6-tetrahydro[1,2']bipyridinyl-5'-yl)pyrimidin-2-yl]amino]-4methylphenyl]-3-(trifluoromethyl)benzamide 812700-10-0P, N-[3-[4-6-[3-(Diethylamino)propyl]amino]pyridin-3-yl]pyrimidin-2yl]amino]-4-methylphenyl]-3-(trifluoromethyl)benzamide 812700-11-1P, N-[4-Methyl-3-[[4-[6-[(pyridin-4ylmethyl)amino]pyridin-3-yl]pyrimidin-2-yl]amino]phenyl]-3-(trifluoromethyl)benzamide 812700-12-2P, N-[3-[[4-[6-[(2-Methoxyethyl)amino]pyridin-3-yl]pyrimidin-2-yl]amino]-4-methylphenyl]-3-(trifluoromethyl)benzamide 812700-13-3P, N-[3-[[4-[6-[(2-Hydroxypropyl)sulfanyl]pyridin-3-yl]pyrimidin-2-yl]amino]-4-methylphenyl]-3-(trifluoromethyl)benzamide 812700-14-4P, N-[4-Methyl-3-[[4-[6-(pyridin-3-yloxy)pyridin-3-yl]pyrimidin-2-yl]amino]phenyl]-3-(trifluoromethyl) benzamide 812700-15-5P, N-[4-Methyl-3-[[4-[6-[(1-methylpiperidin-4-yl)oxy]pyridin-3-yl]pyrimidin-2-yl]amino]phenyl]-3-(trifluoromethyl)benzamide RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (drug candidate; preparation of aminopyrimidine derivs. as Raf kinase

812699-92-6 CAPLUS
Benzamide, N-[4-methyl-3-[[4-[6-[[3-(4-morpholinyl)propyl]amino]-3-pyridinyl]-2-pyrimidinyl]amino]phenyl]-3-(trifluoromethyl)- (CA INDEX

RN

CN

inhibitors for treatment of proliferative diseases such as cancer)

NAME) (CH₂)₃-

812699-93-7 CAPLUS RN

Benzamide, N-[4-methyl-3-[[4-[6-(4-pyridinylamino)-3-pyridinyl]-2-CN pyrimidinyl]amino]phenyl]-3-(trifluoromethyl)- (CA INDEX NAME)

RN 812699-94-8 CAPLUS

CN Benzamide, 3-(difluoromethoxy)-N-[3-[[4-[6-[(2-hydroxyethyl)amino]-3pyridinyl]-2-pyrimidinyl]amino]-4-methylphenyl]- (CA INDEX NAME)

812699-96-0 CAPLUS

Benzamide, N-[3-[[4-[6-(dimethylamino)-3-pyridinyl]-2-pyrimidinyl]amino]-4-CN methylphenyl]-3-(trifluoromethyl)- (CA INDEX NAME)

812699-97-1 CAPLUS

CN Benzamide, N-[3-[[4-[6-(2-methoxyethoxy)-3-pyridinyl]-2-pyrimidinyl]amino]-4-methylphenyl]-3-(trifluoromethyl)- (CA INDEX NAME)

RN 812699-99-3 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-[6-(4-methyl-1-piperazinyl)-3-pyridinyl]-2-pyrimidinyl]amino]phenyl]-3-(trifluoromethyl)- (CA INDEX NAME)

RN 812700-01-9 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-[6-(methylamino)-3-pyridinyl]-2-pyrimidinyl]amino]phenyl]-3-(trifluoromethyl)- (CA INDEX NAME)

RN 812700-03-1 CAPLUS

CN Benzamide, N-[3-[[4-[6-(cyclopropylamino)-3-pyridinyl]-2-pyrimidinyl]amino]-4-methylphenyl]-3-(trifluoromethyl)- (CA INDEX NAME)

RN 812700-05-3 CAPLUS

CN Benzamide, N-[3-[[4-[6-(cyclopentylamino)-3-pyridinyl]-2-pyrimidinyl]amino]-4-methylphenyl]-3-(trifluoromethyl)- (CA INDEX NAME)

RN 812700-07-5 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-[6-(4-thiomorpholinyl)-3-pyridinyl]-2-pyrimidinyl]amino]phenyl]-3-(trifluoromethyl)- (CA INDEX NAME)

RN 812700-08-6 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-[6-(4-morpholinyl)-3-pyridinyl]-2-pyrimidinyl]amino]phenyl]-3-(trifluoromethyl)- (CA INDEX NAME)

RN 812700-09-7 CAPLUS

CN Benzamide, N-[3-[[4-[6-(4-hydroxy-1-piperidinyl)-3-pyridinyl]-2-pyrimidinyl]amino]-4-methylphenyl]-3-(trifluoromethyl)- (CA INDEX NAME)

RN 812700-10-0 CAPLUS

CN Benzamide, N-[3-[[4-[6-[[3-(diethylamino)propyl]amino]-3-pyridinyl]-2-pyrimidinyl]amino]-4-methylphenyl]-3-(trifluoromethyl)- (CA INDEX NAME)

RN 812700-11-1 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-[6-[(4-pyridinylmethyl)amino]-3-pyridinyl]-2-pyrimidinyl]amino]phenyl]-3-(trifluoromethyl)- (CA INDEX NAME)

RN 812700-12-2 CAPLUS

CN Benzamide, N-[3-[[4-[6-[(2-methoxyethyl)amino]-3-pyridinyl]-2-pyrimidinyl]amino]-4-methylphenyl]-3-(trifluoromethyl)- (CA INDEX NAME)

RN 812700-13-3 CAPLUS

CN Benzamide, N-[3-[[4-[6-[(2-hydroxypropyl)thio]-3-pyridinyl]-2-pyrimidinyl]amino]-4-methylphenyl]-3-(trifluoromethyl)- (CA INDEX NAME)

RN 812700-14-4 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-[6-(3-pyridinyloxy)-3-pyridinyl]-2-pyrimidinyl]amino]phenyl]-3-(trifluoromethyl)- (CA INDEX NAME)

RN 812700-15-5 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-[6-[(1-methyl-4-piperidinyl)oxy]-3-pyridinyl]-2-pyrimidinyl]amino]phenyl]-3-(trifluoromethyl)- (CA INDEX NAME)

IT 812700-23-5, N-[3-[[4-(6-Chloropyridin-3-yl)pyrimidin-2-yl]amino]-

4-methylphenyl]-3-(difluoromethoxy)benzamide

RL: RCT (Reactant); RACT (Reactant or reagent)

(starting material; preparation of aminopyrimidine derivs. as Raf kinase inhibitors for treatment of proliferative diseases such as cancer)

RN 812700-23-5 CAPLUS

CN Benzamide, N-[3-[[4-(6-chloro-3-pyridinyl)-2-pyrimidinyl]amino]-4-methylphenyl]-3-(difluoromethoxy)- (CA INDEX NAME)

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 19 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN
AN
     2004:1080884 CAPLUS
     142:56339
DN
     Process for the preparation of the anti-cancer drug imatinib and its
ΤI
     analogs via aminolysis of a (chloromethyl)benzamide intermediate
ΙN
     Kompella, Amala; Bhujanga Rao, Adibhatla Kali Sathya; Venkaiah Chowdary,
     Nannapaneni; Srinivas, Rachakonda
PΑ
     Natco Pharma Limited, India
SO
     PCT Int. Appl., 65 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                        KIND
                               DATE APPLICATION NO.
                                                                 DATE
                         ----
                               -----
                                           _____
                         A1 20041216 WO 2003-IN211
     WO 2004108699
                                                                20030606
PΙ
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
             PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,
             TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2003242988
                         A1
                                20050104
                                          AU 2003-242988
                                                                  20030606
PRAI WO 2003-IN211
                          Α
                                20030606
OS
     CASREACT 142:56339
     The invention discloses a process for the manufacture of imatinib [I; X =
AB
     4-methylpiperazin-1-yl] and three of its new analogs I [X =
     morpholin-4-yl, piperidin-1-yl, and imidazol-1-yl] through aminolyis of
     the intermediate I[X = Cl]. The mesylate (methanesulfonate) salt of
     imatinib is a popular life-saving drug, used to treat chronic myelogenous
     leukemia (CML). The other compds. are claimed as protein tyrosine kinase
     inhibitors (no data). The new process involves fewer steps (7) than the 9
     steps in the known process disclosed in EP 0564409 and US 55211584, making
     the new process simple and cost effective. Yields are fairly high in all
     steps (65-90%), as compared to 20-50% realized by the prior art process.
     Reaction times are fairly low (8-10 h) in all steps, as compared to the
     time (12-25 h) for most of the stages in the prior art process.
     Obnoxious, foul smelling, and difficult-to-handle reagents are avoided,
     making the process safe and environmentally safe for com. application.
     Column chromatog., which is not practical on com. scale, is avoided at all
     stages. Consequently the process is simple and economical. Thus,
     2-amino-4-nitrotoluene in BuOH was treated with HNO3 and then with aqueous
     cyanamide, and the mixture was heated at 90-95° for 12 h, to give 61%
     yield of 2-methyl-5-nitrophenylguanidine nitrate (II) on a 22-kg scale,
     with simple recovery of pure, unreacted 2-amino-4-nitrotoluene from the
     mother liquors, also on a multi-kg scale. Cyclization of II with
     3-(dimethylamino)-1-(3-pyridyl)-2-propen-1-one in refluxing BuOH in the
     presence of NaOH for 10 h gave intermediate III quant., with III being
     isolated in 88% yield on a 21-kg scale. This was followed by reduction of the
     nitro group of III, using SnCl2 in concentrated HCl, to give the corresponding
     amine in 61.5% yield, on a 10-kg scale. The amine was amidated with
     4-(C1CH2)C6H4COC1 (preparation given) using Et3N in CHCl3, giving the
     (chloromethyl)benzamide intermediate I [X = Cl] in 70% yield on a 13.9-kg
     scale. This compound reacted with N-methylpiperazine in DMF over 4 h at
     20-40°, giving imatinib free base after extraction into CHCl3, carbon
     treatment, evaporation, and trituration with EtOAc. Imatinib was obtained in
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61% yield, 99.8% purity by HPLC, and on a 9.8-kg scale. The other three products I were obtained almost identically, using different amines in the final step.

IT 404844-11-7P

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (process intermediate; manufacture of imatinib and analogs via aminolysis of (chloromethyl)benzamide intermediate)

RN

404844-11-7 CAPLUS Benzamide, 4-(chloromethyl)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-CN pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RE.CNT THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/528,913

L10 ANSWER 20 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2004:1067788 CAPLUS

DN 142:204407

TI Acid-Base Profiling of Imatinib (Gleevec) and Its Fragments

AU Szakacs, Zoltan; Beni, Szabolcs; Varga, Zoltan; Oerfi, Laszlo; Keri, Gyoergy; Noszal, Bela

CS Department of Inorganic and Analytical Chemistry, Lorand Eoetvoes University, Budapest, H-1117, Hung.

SO Journal of Medicinal Chemistry (2005), 48(1), 249-255 CODEN: JMCMAR; ISSN: 0022-2623

PB American Chemical Society

DT Journal

LA English

OS CASREACT 142:204407

AB The site-specific basicities of imatinib (I) (Gleevec, a new signal transduction inhibitor drug of chronic myeloid leukemia) and two of its fragment compds. were quantitated in terms of protonation macroconstants, microconstants, and group consts. by NMR-pH and pH-potentiometric titrns. Sequential protonation of imatinib follows the N34, N11, N31, N13 order, in which N11 and N31 show commensurable basicity, but negligible intramol. interaction. Fragment compds. include two "halves" of imatinib, and their moiety-specific basicities confirm the NMR-based protonation sequence of the parent compound NMR-pH profiles, macro- and/or microscopic protonation schemes, and species-specific distribution diagrams are presented. On the basis of these data, imatinib is shown to be predominantly neutral, monocationic, and tricationic at intestinal, blood, and gastric pH, resp. The mol. hypotheses on imatinib binding to the Bcr-Abl oncogene fusion protein are interpreted at the site-specific level in view of the moiety basicities of imatinib.

IT 404844-11-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(acid-base profiling of imatinib (Gleevec) and its fragments)

RN 404844-11-7 CAPLUS

CN Benzamide, 4-(chloromethyl)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L10 ANSWER 21 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN
- AN 2004:1060780 CAPLUS
- DN 142:38275
- TI Preparation of N-phenyl-2-pyrimidine-amine derivatives as anticancer agents and process for the preparation thereof
- IN Kim, Dong-Yeon; Kim, Jae-Gun; Cho, Dae-Jin; Lee, Gong-Yeal; Kim, Hong-Youb; Woo, Seok-Hun; Kim, Yong-Seok; Bae, Woo-Chul; Lee, Sun-Ahe; Han, Byoung-Cheol
- PA Il Yang Pharm. Co., Ltd., S. Korea
- SO U.S. Pat. Appl. Publ., 21 pp., Cont.-in-part of U.S. Ser. No. 446,446, abandoned.

 CODEN: USXXCO
- DT Patent
- LA English

FAN.CNT 3

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2004248918	A1	20041209	US 2004-806834	20040322
PRAI KR 2003-28669	A	20030506		
US 2003-446446	В2	20030528		

OS MARPAT 142:38275

AΒ The title compds. (I) [R1 = 3- or 4-pyridyl; R2, R3 = H, lower alkyl; R6,R7 = Q; wherein X = O, NH; n= O, 1; R9 = C5-10 9 aliphatic radical, 5- to 7-membered (un)saturated monocyclic radical, or bi- or tricyclic radical optionally combined with benzene ring, each of which has 1 to 3 hetero atoms selected from a group consisting of N, O, and S, piperazinyl or homopiperazinyl each of which is substituted by lower alkyl; R4, R5, R7, R8 = H or one or two thereof each represent halogen, lower alkyl, or lower alkoxy; when R6 is Q, or one or two of R4, R5, R6, and R8 each represent halogen, lower alkyl, or lower alkoxy; when R7 is Q, provided that R6 or R7 represents Q wherein n = 0 and R9 = 4-methylpiperazine, then one or more of R4, R5, R7, and R8, or one or more of R4, R5, R6, and R8 are halogen] or salts thereof are prepared These compds. show a superior effect on lung cancer, gastric cancer, colon cancer, pancreatic cancer, hepatoma, prostatic cancer, breast cancer, chronic or acute leukemia, hematol. malignancy, encephalophyma, bladder cancer, rectal cancer, or cervical cancer of warm-blooded animals. The present invention also relates to a process for preparing the compound I, and to a pharmaceutical composition for

the

treatment of the above various diseases, which comprises an effective amount of the compound as an active ingredient together with pharmaceutically acceptable inert carriers. Thus, 3-dimethylamino-1-(3-pyridyl)-2-propen-1one was cyclocondensed with 2-methyl-5-nitrophenylguanidine nitrate in the presence of sodium hydroxide in isopropanol under reflux for 18 h to give N-(2-methyl-5-nitrophenyl)-4-(3-pyridyl)-2-pyrimidineamine which wasreduced by stannous chloride dihydrate in EtOAc/ethanol under reflux for 4 h to give N-(5-amino-2-methylphenyl)-4-(3-pyridyl)-2-pyrimidineamine (II). II underwent amidation with 4-chloromethylbenzoyl chloride in Et3N in THF under reflux for 4 h to give N-[5-(4-chloromethylbenzoylamino)-2methylphenyl]-4-(3-pyridyl)-2-pyrimdineamine which was stirred with pyridine for 30 min and then refluxed with N-methylhomopiperazine for 12 h to give 4-(4-methylhomopiperazin-1-ylmethyl)-N-[4-methyl-3-[[4-(pyridin-3yl)pyrimidin-2-yl]amino]phenyl]benzamide (III). III methanesulfonate and 4-[(4-methylpiperazin-1-ylamino)methyl]-N-[4-methyl-3-[[4-(pyridin-3yl)pyrimidin-2-yl]amino]phenyl]benzamide methanesulfonate showed IC50 of 1.20 and $<0.10 \mu g/mL$, resp., against the growth of K562 cells.

IT 404844-11-7P, N-[5-[(4-Chloromethylbenzoyl)amino]-2-methylphenyl]-4-(3-pyridyl)-2-pyrimidineamine 475587-06-5P, N-[3-(4-Chloromethylbenzoylamino)phenyl]-4-(3-pyridyl)-2-pyrimidineamine 796738-69-7P, N-[5-(4-Chloromethylbenzoylamino)-4-methylphenyl]-4-

(3-pyridyl)-2-pyrimidineamine 796738-70-0P, N-[4-(4-Chloromethylbenzoylamino)phenyl]-4-(3-pyridyl)-2-pyrimidineamine 796738-74-4P, N-[4-(4-Chloromethylbenzoylamino)-2-methylphenyl]-4-(3-pyridyl)-2-pyrimidineamine 796738-79-9P, N-[5-(4-Chloromethylbenzoylamino)-2-methoxyphenyl]-4-(3-pyridyl)-2-pyrimidineamine 796738-84-6P, N-[3-(4-Chloromethylbenzoylamino)-4-fluorophenyl]-4-(3-pyridyl)-2-pyrimidineamine RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (intermediate; preparation of N-phenylpyrimidine-2-amine derivs. as

(intermediate; preparation of N-phenylpyrimidine-2-amine derivs. as anticancer agents)

RN 404844-11-7 CAPLUS

CN Benzamide, 4-(chloromethyl)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 475587-06-5 CAPLUS

CN Benzamide, 4-(chloromethyl)-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 796738-69-7 CAPLUS

CN Benzamide, 4-(chloromethyl)-N-[2-methyl-5-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 796738-70-0 CAPLUS

CN Benzamide, 4-(chloromethyl)-N-[4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 796738-74-4 CAPLUS

CN Benzamide, 4-(chloromethyl)-N-[3-methyl-4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 796738-79-9 CAPLUS

CN Benzamide, 4-(chloromethyl)-N-[4-methoxy-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 796738-84-6 CAPLUS

CN Benzamide, 4-(chloromethyl)-N-[2-fluoro-5-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

ΙT 796738-23-3P, 4-[(4-Methylpiperazin-1-ylamino)methyl]-N-[4-methyl-3-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide 796738-28-8P, 4-(4-Methylpiperazin-1-ylaminomethyl)-N-[2-methyl-5-[4-(pyridin-3-yl)pyrimidin-2-yl]aminophenyl]benzamide 796738-30-2P , 4-(4-Methylhomopiperazin-1-ylmethyl)-N-[4-[[4-(pyridin-3-yl)pyrimidin-2yl]amino]phenyl]benzamide 796738-34-6P, 4-(4-Methylpiperazin-1ylaminomethyl)-N-[3-[4-(pyridin-3-yl)pyrimidin-2-yl]aminophenyl]benzamide 796738-36-8P, 4-(4-Methylhomopiperazin-1-ylmethyl)-N-[3-methyl-4-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide 796738-38-0P, 4-(4-Methylpiperazin-1-ylaminomethyl)-N-[3-methyl-4-[4-(pyridin-3-yl)pyrimidin-2-yl]aminophenyl]benzamide 796738-42-6P , 4-(4-Methylpiperazin-1-ylaminomethyl)-N-[4-methoxy-3-[4-(pyridin-3yl)pyrimidin-2-yl]aminophenyl]benzamide 796738-50-6P, 4-(4-Methylpiperazin-1-ylaminomethyl)-N-[2-fluoro-5-[4-(pyridin-3yl)pyrimidin-2-yl]aminophenyl]benzamide 796738-52-8P, 4-(4-Methylpiperazin-1-ylaminomethyl)-N-[4-[4-(pyridin-3-yl)pyrimidin-2yl]aminophenyl]benzamide 804554-76-5P, 4-[(4-Methylpiperazin-1ylamino)methyl]-N-[4-methyl-3-[[4-(pyridin-3-yl)pyrimidin-2yl]amino]phenyl]benzamide methanesulfonate 804554-78-7P, 4-[(4-Methylpiperazin-1-ylamino)methyl]-N-[2-methyl-5-[[4-(pyridin-3yl)pyrimidin-2-yl]amino]phenyl]benzamide methanesulfonate 804554-79-8P, 4-(4-Methylhomopiperazin-1-ylmethyl)-N-[4-[[4-methylhomopiperazin-1-ylmethylhomopipera-ylmethylhomopipera-ylmethylhomopipera-ylmethylhomopipera-ylmethylhomopipera-ylmethylhomopipera-ylmethylhomopipera-ylmethylhomopipera-ylmethylhomopipera-ylmethylhomop(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide methanesulfonate 804554-81-2P, 4-[(4-Methylpiperazin-1-ylamino)methyl]-N-[3-[[4-Methylpiperazin-1-ylamino)methyl]-N-[3-[[4-Methylpiperazin-1-ylamino)methyl]-N-[3-[[4-Methylpiperazin-1-ylamino)methyl]-N-[3-[[4-Methylpiperazin-1-ylamino]methyl]-N-[3-[[4-Methylpiperazin-1-ylamino]methyl]-N-[3-[[4-Methylpiperazin-1-ylamino]methyl]-N-[3-[[4-Methylpiperazin-1-ylamino]methyl]-N-[3-[[4-Methylpiperazin-1-ylamino]methyl]-N-[3-[[4-Methylpiperazin-1-ylamino]methyl]-N-[3-[[4-Methylpiperazin-1-ylamino]methyl]-N-[3-[[4-Methylpiperazin-1-ylamino]methyl]-N-[3-[[4-Methylpiperazin-1-ylamino]methyl]-N-[3-[[4-Methylpiperazin-1-ylamino]methyl]-N-[3-[[4-Methylpiperazin-1-ylamino]methyl]-N-[3-[[4-Methylpiperazin-1-ylamino]methyl]-N-[3-[[4-Methylpiperazin-1-ylamino]methyl]-N-[3-[[4-Methylpiperazin-1-ylamino]methyl]-N-[3-[[4-Methylpiperazin-1-ylamino]methyl]-N-[3-[[4-Methylpiperazin-1-ylamino]methylpiperazin-1-ylamino]methylpiperazin-1-ylamino[[4-Methylpiperazin-1-ylamino]methylpiperazin-1-ylamino[[4-Methylpiperazin-1-ylamino]methylpiperazin-1-ylamino[[4-Methylpiperazin-1-ylamino]methylpiperazin-1-ylamino[[4-Methylpiperazin-1-ylamino]methylpiperazin-1-ylamino[[4-Methylpiperazin-1-ylamino]methylpiperazin-1-ylamino[[4-Methylpiperazin-1-ylamino]methylpiperazin-1-ylamino[[4-Methylpiperazin-1-ylamino]methylpiperazin-1-ylamino[[4-Methylpiperazin-1-ylamino]methylpiperazin-1-ylamino[[4-Methylpiperazin-1-ylamino]methylpiperazin-1-ylamino[[4-Methylpiperazin-1-ylamino]methylpiperazin-1-ylamino[[4-Methylpiperazin-1-ylamino]methylpiperazin-1-ylamino[[4-Methylpiperazin-1-ylamino]methylpiperazin-1-ylamino[[4-Methylpiperazin-1-ylamino]methylpiperazin-1-ylamino[[4-Methylpiperazin-1-ylamino]methylpiperazin-1-ylamino[[4-Methylpiperazin-1-ylamino]methylpiperazin-1-ylamino[[4-Methylpiperazin-1-ylamino]methylpiperazin-1-ylamino[[4-Methylpiperazin-1-ylamino]methylpiperazin-1-ylamino[[4-Methylpiperazin-1-ylamino[[4-Methylpiperazin-1-ylamino[[4-Methylpiperazin-1-ylamino[[4-Methylpiperazin-1-ylamino[[4-Methylpiperazin-1-ylamino[[4-Methylpiperazin-1-ylamino[[4-Methylpiperazin(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide methanesulfonate 804554-82-3P, 4-(4-Methylhomopiperazin-1-ylmethyl)-N-[3-methyl-4-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide methanesulfonate 804554-83-4P, 4-[(4-Methylpiperazin-1-ylamino)methyl]-N-[3-methyl-4-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide methanesulfonate 804554-85-6P, 4-[(4-Methylpiperazin-1-ylamino)methyl]-N-[4-methoxy-3-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide methanesulfonate 804554-88-9P, 4-[(4-Methylpiperazin-1-ylamino)methyl]-N-[2-fluoro-5-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide methanesulfonate 804554-89-0P, 4-[(4-Methylpiperazin-1-ylamino)methyl]-N-[4-[[4- $\frac{1}{2}$] (pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide methanesulfonate 804554-93-6P, 4-(4-Methylhomopiperazin-1-ylmethyl)-N-[4-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide acetate 804554-95-8P, 4-[(4-Methylpiperazin-1-ylamino)methyl]-N-[4-methyl-3-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide acetate 804554-96-9P, 4-[(4-Methylpiperazin-1-ylamino)methyl]-N-[4-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide acetate 804554-97-0P, 4-(4-Methylhomopiperazin-1-ylmethyl)-N-[4-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide hydrochloride 804554-98-1P, 4-[(4-Methylpiperazin-1-ylamino)methyl]-N-[4-methyl-3-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide hydrochloride 804554-99-2P, 4-[(4-Methylpiperazin-1-ylamino)methyl]-N-[4-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide hydrochloride RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-phenylpyrimidine-2-amine derivs. as anticancer agents) 796738-23-3 CAPLUS
Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN CN

RN 796738-28-8 CAPLUS
CN Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[2-methyl-5-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & \\ & & \\ N & & \\ N & & \\ N & & \\ Me & & \\ \end{array}$$

RN 796738-30-2 CAPLUS

CN Benzamide, 4-[(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)methyl]-N-[4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 796738-34-6 CAPLUS

CN Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 796738-36-8 CAPLUS

CN Benzamide, 4-[(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)methyl]-N-[3-methyl-4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 796738-38-0 CAPLUS

CN Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[3-methyl-4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{N} \\ \text$$

RN 796738-42-6 CAPLUS

CN Benzamide, N-[4-methoxy-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4[[(4-methyl-1-piperazinyl)amino]methyl]- (CA INDEX NAME)

RN 796738-50-6 CAPLUS

CN Benzamide, N-[2-fluoro-5-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4-[[(4-methyl-1-piperazinyl)amino]methyl]- (CA INDEX NAME)

RN 796738-52-8 CAPLUS

CN Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 804554-76-5 CAPLUS

CN Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 796738-23-3 CMF C29 H32 N8 O

CM 2

CRN 75-75-2 CMF C H4 O3 S

RN 804554-78-7 CAPLUS

CN Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[2-methyl-5-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 796738-28-8 CMF C29 H32 N8 O

CM 2

CRN 75-75-2 CMF C H4 O3 S

RN 804554-79-8 CAPLUS

CN Benzamide, 4-[(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)methyl]-N-[4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 796738-30-2 CMF C29 H31 N7 O

CM 2

CRN 75-75-2 CMF C H4 O3 S

RN 804554-81-2 CAPLUS

CN Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 796738-34-6 CMF C28 H30 N8 O

$$\begin{array}{c|c} O \\ \hline \\ N \\ \hline \\ N \\ \end{array}$$

$$\begin{array}{c|c} O \\ \hline \\ C \\ \hline \\ N \\ \end{array}$$

$$\begin{array}{c|c} O \\ \hline \\ C \\ \hline \\ N \\ \end{array}$$

$$\begin{array}{c|c} N \\ \hline \\ N \\ \end{array}$$

CM 2

CRN 75-75-2 CMF C H4 O3 S

RN 804554-82-3 CAPLUS

CN Benzamide, 4-[(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)methyl]-N-[3-methyl-4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 796738-36-8 CMF C30 H33 N7 O

$$Me^{-N}$$
 $N-CH_2$
 $C-NH$
 NH
 NH
 NH

CM 2

CRN 75-75-2 CMF C H4 O3 S

RN 804554-83-4 CAPLUS

CN Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[3-methyl-4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 796738-38-0 CMF C29 H32 N8 O

$$\begin{array}{c|c} & & & \\ &$$

CM 2

CRN 75-75-2 CMF C H4 O3 S

RN 804554-85-6 CAPLUS

CN Benzamide, N-[4-methoxy-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4[[(4-methyl-1-piperazinyl)amino]methyl]-, monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 796738-42-6 CMF C29 H32 N8 O2

CM 2

CRN 75-75-2

CMF C H4 O3 S

RN 804554-88-9 CAPLUS

CN Benzamide, N-[2-fluoro-5-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4[[(4-methyl-1-piperazinyl)amino]methyl]-, monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 796738-50-6 CMF C28 H29 F N8 O

CM 2

CRN 75-75-2 CMF C H4 O3 S

RN 804554-89-0 CAPLUS

CN Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 796738-52-8 CMF C28 H30 N8 O

$$\begin{array}{c|c} & & & \\ &$$

CM 2

CRN 75-75-2 CMF C H4 O3 S

RN 804554-93-6 CAPLUS

CN Benzamide, 4-[(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)methyl]-N-[4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, monoacetate (9CI) (CA INDEX NAME)

CM 1

CRN 796738-30-2 CMF C29 H31 N7 O

$$Me^{-N}$$
 $N-CH_2$
 $C-NH$
 NH
 N

CM 2

CRN 64-19-7 CMF C2 H4 O2

RN 804554-95-8 CAPLUS

CN Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[4-methyl-3-[[4-(3-

pyridinyl)-2-pyrimidinyl]amino]phenyl]-, monoacetate (9CI) (CA INDEX NAME)

CM 1

CRN 796738-23-3 CMF C29 H32 N8 O

$$\begin{array}{c|c} & & & \\ &$$

CM 2

CRN 64-19-7 CMF C2 H4 O2

RN 804554-96-9 CAPLUS

CN Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, monoacetate (9CI) (CA INDEX NAME)

CM 1

CRN 796738-52-8 CMF C28 H30 N8 O

CM 2

CRN 64-19-7 CMF C2 H4 O2

RN 804554-97-0 CAPLUS

CN Benzamide, 4-[(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)methyl]-N-[4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)

Me N
$$\sim$$
 CH₂ \sim C \sim NH \sim NH \sim NH \sim NH

● HCl

RN 804554-98-1 CAPLUS

CN Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 804554-99-2 CAPLUS

CN Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

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ANSWER 22 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN
L10
ΑN
       2004:996162 CAPLUS
DN
       141:424205
       New N-phenyl-2-pyrimidine-amine derivatives related to imatinib mesylate,
ΤI
       useful as antitumor agents, and process for their preparation
ΙN
       Kim, Dong-Yeon; Kim, Jae-Gun; Cho, Dae-Jin; Lee, Gong-Yeal; Kim,
       Hong-Youb; Woo, Seok-Hun; Kim, Yong-Seok; Bae, Woo-chul; Lee, Sun-Ahe;
       Han, Byoung-Cheol
       Il Yang Pharm. Co. Ltd., S. Korea
PΑ
SO
       PCT Int. Appl., 55 pp.
       CODEN: PIXXD2
DT
       Patent
T.A
       English
FAN.CNT 3
       PATENT NO.
                                   KIND
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       WO 2004099187
PΙ
                                             20041118
                                                            WO 2004-KR611
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            W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
                  CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
                  GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK,
                 GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
             RW:
                  TD, TG
       KR 2004095155
                                    Α
                                             20041112
                                                              KR 2004-17594
                                                                                              20040316
PRAI KR 2003-28669
                                             20030506
                                    Α
OS
       MARPAT 141:424205
AΒ
       The invention relates to N-phenyl-2-pyrimidine-amine derivs. and their
       salts, which show superior action against lung cancer, gastric cancer,
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colon cancer, pancreatic cancer, hepatoma, prostatic cancer, breast cancer, chronic or acute leukemia, hematol. malignancy, encephalophyma, bladder cancer, rectal cancer, or cervical cancer, etc., in warm-blooded animals. The invention also relates to a process for preparing the compds., and to pharmaceutical compns. for the treatment of cancer, etc., which comprise the compds. as active ingredients, together with pharmaceutically acceptable inert carriers. Specifically claimed are compds. I and salts [wherein: R1 = 3-pyridyl or 4-pyridyl; R2, R3 = (independently) H or lower alkyl; R6 or R7 = -NHCO-p-C6H4-CH2XnR9; X = O or NH; n = 0-1; R9 = C5-10 aliphatic, or 5- to 7-membered (un) saturated monocycle, or a bi- or tricyclic radical optionally combined with a benzene ring, each with 1-3 N/O/S heteroatoms, or (homo)piperazinyl substituted by lower alkyl; 1-2 of R4, R5, R6/R7, and R8 = halo, lower alkyl, or lower alkoxy; others = H; provided that when R6 or R7 = said radical and n = 0 and R9 = 4-methylpiperazinyl, then one or more of R4, R5, R6/R7, and R8 is halo]. For example, 3-acetylpyridine was converted in 3 steps to N-(2-methyl-5-nitrophenyl)-4-(3-pyridyl)-2-pyrimidineamine. This nitro compound was reduced to the amine with SnCl2, and the amine was amidated with 4-(ClCH2)C6H4COCl. The obtained 4-(chloromethyl)benzamide derivative was coupled with 1-amino-4-methylpiperazine to give invention compound II, which was converted to the methanesulfonate salt (III). The latter was more than 5-fold more potent than imatinib mesylate against the human CML cell line K562, and was at least as active against other cell lines. Other compds. I showed different spectra of superiority to imatinib mesylate against the various cancer cell lines. Compound IV (mesylate) had excellent, dose-related therapeutic activity against sarcoma-180 in ICR mice, giving an inhibition ratio of 63.0% at 50~mg/kg i.v. In an oral

pharmacokinetic assay in rats, III roughly matched the performance of imatinib mesylate (Tmax, Cmax, and AUC) at half the dosage. III also showed no acute toxicity toward mice at a dose of 2000 mg/kg orally. IV mesylate had an i.v. LD50 of 75-100 mg/kg in mice, still much safer than cisplatin (11 mg/kg i.v.). Although several compds. I are preferred with respect to protein kinase inhibition (no data), II is particularly preferred. Therefore III and IV mesylate are expected to be new and potent therapeutic agents for the treatment of the aforementioned cancers, in addition to CML.

TT 796738-23-3P, 4-[[(4-Methylpiperazin-1-yl)amino]methyl]-N-[4-methyl-3-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide 796738-30-2P, 4-[(4-Methylhomopiperazin-1-yl)methyl]-N-[4-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); PKT (Pharmacokinetics); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(drug candidate; preparation of phenylpyrimidinamine derivs. related to imatinib mesylate as antitumor agents)

RN 796738-23-3 CAPLUS

CN

Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 796738-30-2 CAPLUS

CN Benzamide, 4-[(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)methyl]-N-[4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

TT 796738-24-4P, 4-[[(4-Methylpiperazin-1-yl)amino]methyl]-N-[4-methyl-3-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide methanesulfonate 796738-31-3P, 4-[(4-Methylhomopiperazin-1-yl)methyl]-N-[4-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide methanesulfonate

RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); PKT (Pharmacokinetics); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of phenylpyrimidinamine derivs. related to imatinib mesylate as antitumor agents)

RN 796738-24-4 CAPLUS

CN Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, methanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 796738-23-3 CMF C29 H32 N8 O

CM 2

CRN 75-75-2 CMF C H4 O3 S

RN 796738-31-3 CAPLUS

CN Benzamide, 4-[(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)methyl]-N-[4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, methanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 796738-30-2 CMF C29 H31 N7 O

CM 2

CRN 75-75-2 CMF C H4 O3 S

796738-28-8P, 4-[[(4-Methylpiperazin-1-yl)amino]methyl]-N-[2-ΙT methyl-5-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide 796738-34-6P, 4-[(4-Methylpiperazin-1-yl)amino]methyl]-N-[3-[[4-methylpiperazin-1-yl)amino]methyl]-N-[3-[[4-methylpiperazin-1-yl)amino]methyl]-N-[3-[[4-methylpiperazin-1-yl)amino]methyl]-N-[3-[[4-methylpiperazin-1-yl)amino]methyl]-N-[3-[[4-methylpiperazin-1-yl)amino]methyl]-N-[3-[[4-methylpiperazin-1-yl)amino]methyl]-N-[3-[[4-methylpiperazin-1-yl)amino]methyl]-N-[3-[[4-methylpiperazin-1-yl)amino]methyl]-N-[3-[[4-methylpiperazin-1-yl)amino]methyl]-N-[3-[[4-methylpiperazin-1-yl]amino]methyl]-N-[3-[[4-methylpiperazin-1-yl]amino]methyl]-N-[3-[[4-methylpiperazin-1-yl]amino]methyl]-N-[3-[[4-methylpiperazin-1-yl]amino]methyl]-N-[3-[[4-methylpiperazin-1-yl]amino]methyl]-N-[3-[[4-methylpiperazin-1-yl]amino]methyl]-N-[3-[[4-methylpiperazin-1-yl]amino]methyl]-N-[3-[[4-methylpiperazin-1-yl]amino]methyl]-N-[3-[[4-methylpiperazin-1-yl]amino]methylpiperazin-1-yl]-N-[3-[[4-methylpiperazin-1-yl]amino]methylpiperazin-1-yl]-N-[3-[[4-methylpiperazin-1-yl]amino]methylpiperazin-1-yl]-N-[3-[[4-methylpiperazin-1-yl]amino]methylpiperazin-1-yl]-N-[3-[[4-methylpiperazin-1-yl]amino]methylpiperazin-1-yl]-N-[3-[[4-methylpiperazin-1-yl]amino]methylpiperazin-1-yl]-N-[3-[[4-methylpiperazin-1-yl]amino]methylpiperazin-1-yl]-N-[3-[[4-methylpiperazin-1-yl]amino]methylpiperazin-1-yl]-N-[3-[[4-methylpiperazin-1-yl]amino]methylpiperazin-1-yl]-N-[3-[[4-methylpiperazin-1-yl]amino]methylpiperazin-1-yl]-N-[3-[[4-methylpiperazin-1-yl]amino]methylpiperazin-1-yl]-N-[3-[[4-methylpiperazin-1-yl]amino]methylpiperazin-1-yl]-N-[3-[[4-methylpiperazin-1-yl]amino]methylpiperazin-1-yl]-N-[3-[[4-methylpiperazin-1-yl]amino]methylpiperazin-1-yl]-N-[3-[[4-methylpiperazin-1-yl]amino]methylpiperazin-1-yl]-N-[3-[[4-methylpiperazin-1-yl]amino]methylpiperazin-1-yl]-N-[3-[[4-methylpiperazin-1-yl]amino]methylpiperazin-1-yl]-N-[3-[[4-methylpiperazin-1-yl]amino]methylpiperazin-1-yl]-N-[3-[[4-methylpiperazin-1-yl]amino]methylpiperazin-1-yl]-N-[3-[[4-methylpiperazin-1-yl]-N-[3-[4-methylpiperazin-1-yl]-N-[4-methylpiperazin-1-yl]-N-[4-methylpiperazin-1-yl]-N-[4-methylpiperazin-1(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide 796738-36-8P , 4-[(4-Methylhomopiperazin-1-yl)methyl]-N-[3-methyl-4-[[4-(pyridin-3-methyl-4-[4-(pyridin yl)pyrimidin-2-yl]amino]phenyl]benzamide 796738-38-0P, 4-[[(4-Methylpiperazin-1-yl)amino]methyl]-N-[3-methyl-4-[[4-(pyridin-3-methyl-4-[4-(pyridin-3-[4-(pyridin-3-[4-(pyridin-3-methyl-4-[4-(pyridin-3-[4-(pyridin-3-[4-(pyridin-3-[4-(pyridin-3-[4-(pyridin-3-[4-(pyridin-3-[4-(pyridin-3-[4-(pyridin-3-[4-(pyridin-3-[4-(pyridin-3-[yl)pyrimidin-2-yl]amino]phenyl]benzamide 796738-42-6P, 4-[[(4-Methylpiperazin-1-yl)amino]methyl]-N-[4-methoxy-3-[[4-(pyridin-3-wethyl)amino]methyl]-N-[4-methoxy-3-[4-(pyridin-3-wethyl)amino]methyl]-N-[4-methoxy-3-[4-(pyridin-3-wethyl)amino]methyl]-N-[4-methoxy-3-[4-(pyridin-3-wethyl)amino]methyl]-N-[4-methoxy-3-[4-(pyridin-3-wethyl)amino]methyl]-N-[4-methoxy-3-[4-(pyridin-3-wethyl)amino]methyl]-N-[4-methoxy-3-[4-(pyridin-3-wethyl)amino]methyl]-N-[4-methoxy-3-[4-(pyridin-3-wethyl)amino]methyl]-N-[4-methoxy-3-[4-(pyridin-3-wethyl)amino]methyl]-N-[4-methoxy-3-[4-(pyridin-3-wethyl)amino]methyl]-N-[4-methoxy-3-[4-(pyridin-3-wethyl)amino]methyl]-N-[4-methoxy-3-[4-(pyridin-3-wethyl)amino]methyl]-N-[4-methoxy-3-[4-(pyridin-3-wethyl)amino]methyl]-N-[4-(pyridin-3-wethyl)amino]methyl]-N-[4-(pyridin-3-wethyl)amino]methyl]-N-[4-(pyridin-3-wethyl)amino]methyl]-N-[4-(pyridin-3-wethyl)amino]methyl]-N-[4-(pyridin-3-wethyl)amino]methyl]-N-[4-(pyridin-3-wethyl)amino]methyl]-N-[4-(pyridin-3-wethyl)amino]methyl]-N-[4-(pyridin-3-wethyl)amino]methyl]-N-[4-(pyridin-3-wethyl)amino]methyl]-N-[4-(pyridin-3-wethyl)amino]methyl]-N-[4-(pyridin-3-wethyl)amino]methyl]-N-[4-(pyridin-3-wethyl)amino]methyl]-N-[4-(pyridin-3-wethyl)amino]methyl]-N-[4-(pyridin-3-wethyl)amino]methyl]-N-[4-(pyridin-3-wethyl)amino]methyl]-N-[4-(pyridin-3-wethyl)amino]methyl]-N-[4-(pyridin-3-wethyl)amino]methylaminyl)pyrimidin-2-yl]amino]phenyl]benzamide 796738-50-6P, 4-[[(4-Methylpiperazin-1-yl)amino]methyl]-N-[2-fluoro-5-[[4-(pyridin-3yl)pyrimidin-2-yl]amino]phenyl]benzamide 796738-52-8P, 4-[[(4-Methylpiperazin-1-yl)amino]methyl]-N-[4-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (drug candidate; preparation of phenylpyrimidinamine derivs. related to imatinib mesylate as antitumor agents) RN 796738-28-8 CAPLUS

CN Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[2-methyl-5-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 796738-34-6 CAPLUS

CN Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 796738-36-8 CAPLUS

CN Benzamide, 4-[(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)methyl]-N-[3-methyl-4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 796738-38-0 CAPLUS

CN Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[3-methyl-4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{N} \\ \text$$

RN 796738-42-6 CAPLUS

CN Benzamide, N-[4-methoxy-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4-[[(4-methyl-1-piperazinyl)amino]methyl]- (CA INDEX NAME)

RN 796738-50-6 CAPLUS

CN Benzamide, N-[2-fluoro-5-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4[[(4-methyl-1-piperazinyl)amino]methyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 796738-52-8 CAPLUS

CN Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

N NH
$$\dot{C}$$
 NH \dot{N} NH \dot{C} NH \dot{N} NH

IT 796738-29-9P, 4-[(4-Methylpiperazin-1-yl)amino]methyl]-N-[2methyl-5-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide methanesulfonate 796738-35-7P, 4-[[(4-Methylpiperazin-1yl)amino]methyl]-N-[3-[[4-(pyridin-3-yl)pyrimidin-2yl]amino]phenyl]benzamide methanesulfonate 796738-37-9P, 4-[(4-Methylhomopiperazin-1-yl)methyl]-N-[3-methyl-4-[[4-(pyridin-3yl)pyrimidin-2-yl]amino]phenyl]benzamide methanesulfonate 796738-39-1P, 4-[(4-Methylpiperazin-1-yl)amino]methyl]-N-[3methyl-4-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide methanesulfonate 796738-43-7P, 4-[[(4-Methylpiperazin-1yl)amino]methyl]-N-[4-methoxy-3-[[4-(pyridin-3-yl)pyrimidin-2yl]amino]phenyl]benzamide methanesulfonate 796738-51-7P, 4-[[(4-Methylpiperazin-1-yl)amino]methyl]-N-[2-fluoro-5-[[4-(pyridin-3yl)pyrimidin-2-yl]amino]phenyl]benzamide methanesulfonate 796738-53-9P, 4-[[(4-Methylpiperazin-1-yl)amino]methyl]-N-[4-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide methanesulfonate 796738-60-8P, 4-[(4-Methylhomopiperazin-1-yl)methyl]-N-[4-[[4-methylhomopiperazin-1-yl]methylhomopiperazin-1-yl]methylhomopiperazin-1-yl]-N-[4-[[4-methylhomopiperazin-1-yl]methylhomopiperazin-1-yl]-N-[4-[[4-methylhomopiperazin-1-yl]methylhomopiperazin-1-yl]-N-[4-[[4-methylhomopiperazin-1-yl]methylhomopiperazin-1-yl]-N-[4-[[4-methylhomopiperazin-1-yl]methylhomopiperazin-1-yl]-N-[4-[[4-methylhomopiperazin-1-yl]methylhomopiperazin-1-yl]-N-[4-[[4-methylhomopiperazin-1-yl]methylhomopiperazin-1-yl]-N-[4-[[4-methylhomopiperazin-1-yl]methylhomopiperazin-1-yl]-N-[4-[4-methylhomopiperazin-1-yl]-N-[4-[4-methylhomopiperazin-1-yl]-N-[4-[4-methylhomopiperazin-1-yl]-N-[4-[4-methylhomopiperazin-1-yl]-N-[4-[4-methylhomopiperazin-1-yl]-N-[4-[4-methylhomopiperazin-1-yl]-N-[4-[4-methylhomopiperazin-1-yl]-N-[4-[4-methylhomopiperazin-1-yl]-N-[4-[4-methylhomopiperazin-1-yl]-N-[4-[4-methylhomopiperazin-1-yl]-N-[4-[4-methylhomopiperazin-1-yl]-N-[4-[4-methylhomopiperazin-1-yl]-N-[4-[4-methylhomopiperazin-1-yl]-N-[4-[4-methylhomopiperazin-1-yl]-N-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide acetate 796738-62-0P, 4-[[(4-Methylpiperazin-1-yl)amino]methyl]-N-[4methyl-3-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide acetate 796738-63-1P, 4-[(4-Methylpiperazin-1-yl)amino]methyl]-N-[4-[[4-Methylpiperazin-1-yl)amino]methyl]-N-[4-[[4-Methylpiperazin-1-yl)amino]methyl]-N-[4-[[4-Methylpiperazin-1-yl)amino]methyl]-N-[4-[[4-Methylpiperazin-1-yl)amino]methyl]-N-[4-[[4-Methylpiperazin-1-yl]amino]methyl]-N-[4-[[4-Methylpiperazin-1-yl]amino]methyl]-N-[4-[[4-Methylpiperazin-1-yl]amino]methyl]-N-[4-[[4-Methylpiperazin-1-yl]amino]methyl]-N-[4-[[4-Methylpiperazin-1-yl]amino]methyl]-N-[4-[[4-Methylpiperazin-1-yl]amino]methyl]-N-[4-[[4-Methylpiperazin-1-yl]amino]methyl]-N-[4-[[4-Methylpiperazin-1-yl]amino]methyl]-N-[4-[[4-Methylpiperazin-1-yl]amino]methyl]-N-[4-[[4-Methylpiperazin-1-yl]amino]methyl]-N-[4-[[4-Methylpiperazin-1-yl]amino]methyl]-N-[4-[[4-Methylpiperazin-1-yl]amino]methyl]-N-[4-[[4-Methylpiperazin-1-yl]amino]methyl]-N-[4-[[4-Methylpiperazin-1-yl]amino]methylpiperazin-1-yl]amino]methylpiperazin-1-yl]amino[[4-Methylpiperazin-1-yl]amino]methylpiperazin-1-yl]amino[[4-Methylpiper(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide acetate 796738-64-2P, 4-[(4-Methylhomopiperazin-1-yl)methyl]-N-[4-[[4-methylhomopiperazin-1-yl]methyl]-N-[4-[4-methylhomopiperazin-1-yl]methyl]-N-[4-[4-methylhomopiperazin-1-yl]methylhomopiperazin-1-yl]methylhomopiperazin-1-yl]methylhomopiperazin-1-yl]methylhomopiperazin-1-yl]methylhomopiperazin-1-yl]methylhomopiperazin-1-yl]methylhomopiperazin-1-yllmethylhomopiperazin-1-yllmethylhomopiperazin-1-yllmethylhomopiperazin-1-yllmethylhomopiperazin-1-yllmethylhomopiperazin-1-yllmethylhomopiperazin-1-yllmethylhomopiperazin-1-yllmethylhomopiperazin-1-yllmethylhomopiperazin-1-yllmethylhomopiperazin-1-yllmethylhomopiperazin-1-yllmethylhomopiperazin-1-yllmethyllmethylhomopiperazin-1-yllmethylhomopiperazin-1-yllmethyl(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide hydrochloride 796738-65-3P, 4-[[(4-Methylpiperazin-1-yl)amino]methyl]-N-[4-methylpiperazin-1-yl)amino]methyl]-N-[4-methylpiperazin-1-yl)amino]methylpiperazin-1-yl)amino[amino]methylpiperazin-1-yl]amino[amino]methylpiperazin-1-yl]amino[amino]methylpiperazin-1-yl]amino[amino]methylpiperazin-1-yl]amino[amino]methylpiperazin-1-yl]amino[amino]methylpiperazin-1-yl]amino[amino]methylpiperazin-1-yl]amino[amino]methylpiperazin-1-yl]amino[amino]methylpimethyl-3-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide hydrochloride 796738-66-4P, 4-[[(4-Methylpiperazin-1yl)amino]methyl]-N-[4-[[4-(pyridin-3-yl)pyrimidin-2yl]amino]phenyl]benzamide hydrochloride RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) imatinib mesylate as antitumor agents) RN

(drug candidate; preparation of phenylpyrimidinamine derivs. related to

796738-29-9 CAPLUS

pyridinyl)-2-pyrimidinyl]amino|phenyl]-, methanesulfonate (9CI) (CA INDEX NAME)

CM1

CN

CRN 796738-28-8 CMF C29 H32 N8 O

CM 2

CRN 75-75-2 CMF C H4 O3 S

RN 796738-35-7 CAPLUS

CN Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, methanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 796738-34-6 CMF C28 H30 N8 O

CM 2

CRN 75-75-2 CMF C H4 O3 S

RN 796738-37-9 CAPLUS

CN Benzamide, 4-[(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)methyl]-N-[3-methyl-

4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, methanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 796738-36-8 CMF C30 H33 N7 O

CM 2

CRN 75-75-2 CMF C H4 O3 S

RN 796738-39-1 CAPLUS

CN Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[3-methyl-4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, methanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 796738-38-0 CMF C29 H32 N8 O

$$\begin{array}{c} \text{Me} \\ \text{N} \\ \text$$

CM 2

CRN 75-75-2

CMF C H4 O3 S

RN 796738-43-7 CAPLUS

CN Benzamide, N-[4-methoxy-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4[[(4-methyl-1-piperazinyl)amino]methyl]-, methanesulfonate (9CI) (CA
INDEX NAME)

CM 1

CRN 796738-42-6 CMF C29 H32 N8 O2

CM 2

CRN 75-75-2 CMF C H4 O3 S

RN 796738-51-7 CAPLUS

CN Benzamide, N-[2-fluoro-5-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4[[(4-methyl-1-piperazinyl)amino]methyl]-, methanesulfonate (9CI) (CA
INDEX NAME)

CM 1

CRN 796738-50-6 CMF C28 H29 F N8 O

$$\begin{array}{c|c} & & & \\ & & \\ & & \\ N & & \\ N$$

CM 2

CRN 75-75-2 CMF C H4 O3 S

RN 796738-53-9 CAPLUS

CN Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, methanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 796738-52-8 CMF C28 H30 N8 O

$$\begin{array}{c|c} O & & NH & NH \\ \hline N & NH & CH_2 \\ \hline \end{array}$$

CM 2

CRN 75-75-2 CMF C H4 O3 S

RN 796738-60-8 CAPLUS

CN Benzamide, 4-[(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)methyl]-N-[4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, acetate (9CI) (CA INDEX NAME)

CM 1

CRN 796738-30-2 CMF C29 H31 N7 O

CM 2

CRN 64-19-7 CMF C2 H4 O2

RN 796738-62-0 CAPLUS

CN Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, acetate (9CI) (CA INDEX NAME)

CM 3

CRN 796738-23-3 CMF C29 H32 N8 O

CM 2

CRN 64-19-7 CMF C2 H4 O2

RN 796738-63-1 CAPLUS

CN Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, acetate (9CI) (CA INDEX NAME)

CM 1

CRN 796738-52-8 CMF C28 H30 N8 O

CM 2

CRN 64-19-7 CMF C2 H4 O2

RN 796738-64-2 CAPLUS

CN Benzamide, 4-[(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)methyl]-N-[4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, hydrochloride (9CI) (CA INDEX NAME)

•x HCl

RN 796738-65-3 CAPLUS

CN Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, hydrochloride (9CI) (CA INDEX NAME)

●x HCl

RN 796738-66-4 CAPLUS
CN Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, hydrochloride (9CI) (CA INDEX NAME)

●x HCl

IT 404844-11-7P, N-[5-[[4-(Chloromethyl)benzoyl]amino]-2methylphenyl]-4-(3-pyridyl)-2-pyrimidineamine 475587-06-5P, N-[3-[4-(Chloromethyl)benzoyl]amino]phenyl]-4-(3-pyridyl)-2pyrimidineamine 796738-69-7P, N-[5-[[4-(Chloromethyl)benzoyl]amino]-4-methylphenyl]-4-(3-pyridyl)-2pyrimidineamine 796738-70-0P, N-[4-[[4-(Chloromethyl)benzoyl]amino]phenyl]-4-(3-pyridyl)-2-pyrimidineamine 796738-74-4P, N-[4-[[4-(Chloromethyl)benzoyl]amino]-2methylphenyl]-4-(3-pyridyl)-2-pyrimidineamine 796738-79-9P, N-[5-[[4-(Chloromethyl)benzoyl]amino]-2-methoxyphenyl]-4-(3-pyridyl)-2pyrimidineamine 796738-84-6P, N-[3-[[4-(Chloromethyl)benzoyl]amino]-4-fluorophenyl]-4-(3-pyridyl)-2pyrimidineamine RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (intermediate; preparation of phenylpyrimidinamine derivs. related to imatinib mesylate as antitumor agents) RN 404844-11-7 CAPLUS CN Benzamide, 4-(chloromethyl)-N-[4-methyl-3-[[4-(3-pyridinyl)-2pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 475587-06-5 CAPLUS

CN Benzamide, 4-(chloromethyl)-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 796738-69-7 CAPLUS

CN Benzamide, 4-(chloromethyl)-N-[2-methyl-5-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 796738-70-0 CAPLUS

CN Benzamide, 4-(chloromethyl)-N-[4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 796738-74-4 CAPLUS

CN Benzamide, 4-(chloromethyl)-N-[3-methyl-4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 796738-79-9 CAPLUS

CN Benzamide, 4-(chloromethyl)-N-[4-methoxy-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 796738-84-6 CAPLUS

CN Benzamide, 4-(chloromethyl)-N-[2-fluoro-5-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 23 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN
AN
        2004:996161 CAPLUS
DN
         141:424204
TI
        New N-phenyl-2-pyrimidine-amine derivatives related to imatinib mesylate,
        useful as antitumor agents, and process for the preparation thereof
        Kim, Dong-Yeon; Kim, Jae-Gun; Cho, Dae-Jn; Lee, Gong-Yeal; Kim, Hong-Youb; Woo, Seok-Hun; Bae, Woo-chul; Lee, Sun-Ahe; Han, Byoung-Ceol
ΙN
PA
         Il Yang Pharm Co., Ltd., S. Korea
         PCT Int. Appl., 55 pp.
SO
        CODEN: PIXXD2
DT
        Patent
LA
        English
FAN.CNT 3
         PATENT NO.
                                            KIND
                                                         DATE
                                                                             APPLICATION NO.
                                            ____
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        WO 2004099186
                                                                           WO 2003-KR1029
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                                                         20041118
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                      AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
                       CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH,
                       PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
                RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
                       FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
                       BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
        AU 2003232650
                                             A1
                                                         20041126
                                                                         AU 2003-232650
                                                                                                                      20030526
         KR 2004095155
                                              Α
                                                         20041112
                                                                             KR 2004-17594
                                                                                                                      20040316
PRAI KR 2003-28669
                                              Α
                                                         20030506
         WO 2003-KR1029
                                              W
                                                         20030526
OS
        MARPAT 141:424204
         The invention relates to N-phenyl-2-pyrimidine-amine derivs. and their
AΒ
         salts, which show superior action against tumors, lung cancer, gastric
         cancer, etc., in warm-blooded animals. The invention also relates to a
        process for preparing the compds., and to pharmaceutical compns. for the
        prevention and treatment of cancer, etc., which comprise the compds. as
         active ingredients. Specifically claimed are compds. I and salts
         [wherein: R1 = 3-pyridyl or 4-pyridyl; R2, R3 = (independently) H or lower
         alkyl; R6 or R7 = -NHCO-p-C6H4-CH2XnR9; X = O or NH; n = O-1; R9 = C5+
         aliphatic or heterocycle, or (homo)piperazinyl substituted by lower alkyl;
         1-2 of R4, R5, R6/R7, and R8 = halo, lower alkyl, or lower alkoxy; others
         = H; provided that when R6 or R7 = said radical and n = 0 and R9 =
         4-methylpiperazinyl, then one or more of R4, R5, R6/R7, and R8 is halo].
         For example, 3-acetylpyridine was converted in 3 steps to
        N-(2-methyl-5-nitrophenyl)-4-(3-pyridyl)-2-pyrimidineamine. This nitro
         compound was reduced to the amine with SnCl2, and the amine was amidated
         with 4-(C1CH2)C6H4COC1. The obtained 4-(chloromethyl)benzamide derivative was
         coupled with 1-amino-4-methylpiperazine to give invention compound II, which
         was converted to the methanesulfonate salt (III). The latter was more
         than 5-fold more potent than imatinib mesylate against the human CML cell
         line K562, and was at least as active against other cell lines. Other
         compds. I showed different spectra of superiority to imatinib mesylate
         against the various cancer cell lines. In an oral pharmacokinetic assay
         in rats, III roughly matched the performance of imatinib mesylate (Tmax,
         Cmax, and AUC) at half the dosage. III also showed no acute toxicity
         toward mice at a dose of 2000 mg/kg orally. Although several compds. I
         are preferred with respect to protein kinase inhibition (no data), II is
         particularly preferred.
         796738-23-3P, 4-[[(4-Methylpiperazin-1-yl)amino]methyl]-N-[4-methylpiperazin-1-yl)amino]methyl]-N-[4-methylpiperazin-1-yl)amino]methylpiperazin-1-yl)amino]methylpiperazin-1-yl)amino]methylpiperazin-1-yl)amino]methylpiperazin-1-yl)amino]methylpiperazin-1-yl)amino]methylpiperazin-1-yl)amino]methylpiperazin-1-yl)amino]methylpiperazin-1-yl)amino]methylpiperazin-1-yl)amino]methylpiperazin-1-yl)amino]methylpiperazin-1-yl)amino]methylpiperazin-1-yl)amino]methylpiperazin-1-yl)amino]methylpiperazin-1-yl)amino]methylpiperazin-1-yl)amino]methylpiperazin-1-yl)amino]methylpiperazin-1-yl)amino]methylpiperazin-1-yl)amino]methylpiperazin-1-yl)amino]methylpiperazin-1-yl)amino]methylpiperazin-1-yl)amino]methylpiperazin-1-yl)amino]methylpiperazin-1-yl)amino]methylpiperazin-1-yl)amino[4-yl)amino[4-yl)amino[4-yl)amino[4-yl)amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-yl]amino[4-y
IT
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methyl-3-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide

796738-30-2P, 4-[(4-Methylhomopiperazin-1-yl)methyl]-N-[4-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); PKT (Pharmacokinetics); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(drug candidate; preparation of phenylpyrimidinamine derivs. related to imatinib mesylate as antitumor agents)

RN 796738-23-3 CAPLUS

CN Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 796738-30-2 CAPLUS

CN Benzamide, 4-[(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)methyl]-N-[4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

IT 796738-24-4P, 4-[[(4-Methylpiperazin-1-yl)amino]methyl]-N-[4methyl-3-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide
methanesulfonate 796738-31-3P, 4-[(4-Methylhomopiperazin-1yl)methyl]-N-[4-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide
methanesulfonate

RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); PKT (Pharmacokinetics); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of phenylpyrimidinamine derivs. related to imatinib mesylate as antitumor agents)

RN 796738-24-4 CAPLUS

Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, methanesulfonate (9CI) (CA INDEX NAME)

CM 1

CN

CRN 796738-23-3 CMF C29 H32 N8 O

CM 2

CRN 75-75-2 CMF C H4 O3 S

RN 796738-31-3 CAPLUS

CN Benzamide, 4-[(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)methyl]-N-[4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, methanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 796738-30-2 CMF C29 H31 N7 O

CM 2

CRN 75-75-2 CMF C H4 O3 S

IT 796738-28-8P, 4-[[(4-Methylpiperazin-1-yl)amino]methyl]-N-[2-

methyl-5-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide 796738-34-6P, 4-[(4-Methylpiperazin-1-yl)amino]methyl]-N-[3-[[4-Methylpiperazin-1-yl)amino]methyl]-N-[3-[[4-Methylpiperazin-1-yl)amino]methyl]-N-[3-[[4-Methylpiperazin-1-yl)amino]methyl]-N-[3-[[4-Methylpiperazin-1-yl)amino]methyl]-N-[3-[[4-Methylpiperazin-1-yl)amino]methyl]-N-[3-[[4-Methylpiperazin-1-yl)amino]methyl]-N-[3-[[4-Methylpiperazin-1-yl]amino]methyl]-N-[3-[[4-Methylpiperazin-1-yl]amino]methyl]-N-[3-[[4-Methylpiperazin-1-yl]amino]methyl]-N-[3-[[4-Methylpiperazin-1-yl]amino]methyl]-N-[3-[[4-Methylpiperazin-1-yl]amino]methyl]-N-[3-[[4-Methylpiperazin-1-yl]amino]methyl]-N-[3-[[4-Methylpiperazin-1-yl]amino]methyl]-N-[3-[[4-Methylpiperazin-1-yl]amino]methyl]-N-[3-[[4-Methylpiperazin-1-yl]amino]methyl]-N-[3-[[4-Methylpiperazin-1-yl]amino]methyl]-N-[3-[[4-Methylpiperazin-1-yl]amino]methyl]-N-[3-[[4-Methylpiperazin-1-yl]amino]methylpiperazin-1-yl]amino[[4-Methylpiperazin-1-yl]amino]methylpiperazin-1-yl]amino[[4-Methylpiperazin-1-yl]amino]methylpiperazin-1-yl]amino[[4-Methylpip(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide 796738-36-8P , 4-[(4-Methylhomopiperazin-1-yl)methyl]-N-[3-methyl-4-[[4-(pyridin-3yl)pyrimidin-2-yl]amino]phenyl]benzamide 796738-38-0P, 4-[[(4-Methylpiperazin-1-yl)amino]methyl]-N-[3-methyl-4-[[4-(pyridin-3yl)pyrimidin-2-yl]amino]phenyl]benzamide 796738-42-6P, 4-[[(4-Methylpiperazin-1-yl)amino]methyl]-N-[4-methoxy-3-[[4-(pyridin-3yl)pyrimidin-2-yl]amino]phenyl]benzamide 796738-50-6P, 4-[[(4-Methylpiperazin-1-yl)amino]methyl]-N-[2-fluoro-5-[[4-(pyridin-3yl)pyrimidin-2-yl]amino]phenyl]benzamide 796738-52-8P, 4-[[(4-Methylpiperazin-1-yl)amino]methyl]-N-[4-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(drug candidate; preparation of phenylpyrimidinamine derivs. related to imatinib mesylate as antitumor agents)

RN 796738-28-8 CAPLUS

CN

Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[2-methyl-5-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 796738-34-6 CAPLUS

CN Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 796738-36-8 CAPLUS

CN Benzamide, 4-[(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)methyl]-N-[3-methyl-4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 796738-38-0 CAPLUS

CN Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[3-methyl-4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{N} \\ \text$$

RN 796738-42-6 CAPLUS

CN Benzamide, N-[4-methoxy-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4-[[(4-methyl-1-piperazinyl)amino]methyl]- (CA INDEX NAME)

RN 796738-50-6 CAPLUS

CN Benzamide, N-[2-fluoro-5-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4- [[(4-methyl-1-piperazinyl)amino]methyl]- (CA INDEX NAME)

RN 796738-52-8 CAPLUS

CN Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

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ΙT
                  796738-29-9P, 4-[(4-Methylpiperazin-1-yl)amino]methyl]-N-[2-
                 methyl-5-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide
                 methanesulfonate 796738-35-7P, 4-[[(4-Methylpiperazin-1-
                  yl)amino]methyl]-N-[3-[[4-(pyridin-3-yl)pyrimidin-2-
                  yl]amino]phenyl]benzamide methanesulfonate 796738-37-9P,
                  4-[(4-Methylhomopiperazin-1-yl)methyl]-N-[3-methyl-4-[[4-(pyridin-3-wethyl-4-[3-methyl-4-[4-(pyridin-3-wethyl-4-[4-(pyridin-3-wethyl-4-[4-(pyridin-3-wethyl-4-[4-(pyridin-3-wethyl-4-[4-(pyridin-3-wethyl-4-[4-(pyridin-3-wethyl-4-[4-(pyridin-3-wethyl-4-[4-(pyridin-3-wethyl-4-[4-(pyridin-3-wethyl-4-[4-(pyridin-3-wethyl-4-[4-(pyridin-3-wethyl-4-[4-(pyridin-3-wethyl-4-[4-(pyridin-3-wethyl-4-[4-(pyridin-3-wethyl-4-[4-(pyridin-3-wethyl-4-[4-(pyridin-3-wethyl-4-[4-(pyridin-3-wethyl-4-[4-(pyridin-3-wethyl-4-[4-(pyridin-3-wethyl-4-[4-(pyridin-3-wethyl-4-[4-(pyridin-3-wethyl-4-[4-(pyridin-3-wethyl-4-[4-(pyridin-3-wethyl-4-[4-(pyridin-3-wethyl-4-[4-(pyridin-3-wethyl-4-[4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl-4-(pyridin-3-wethyl
                  yl)pyrimidin-2-yl]amino]phenyl]benzamide methanesulfonate
                  796738-39-1P, 4-[[(4-Methylpiperazin-1-yl)amino]methyl]-N-[3-
                 methyl-4-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide
                 methanesulfonate 796738-43-7P, 4-[[(4-Methylpiperazin-1-
                  yl)amino]methyl]-N-[4-methoxy-3-[[4-(pyridin-3-yl)pyrimidin-2-
                  yl]amino]phenyl]benzamide methanesulfonate 796738-51-7P,
                  4-[[(4-Methylpiperazin-1-yl)amino]methyl]-N-[2-fluoro-5-[[4-(pyridin-3-
                  yl)pyrimidin-2-yl]amino]phenyl]benzamide methanesulfonate
                  796738-53-9P, 4-[(4-Methylpiperazin-1-yl)amino]methyl]-N-[4-[[4-methylpiperazin-1-yl)amino]methyl]-N-[4-[[4-methylpiperazin-1-yl)amino]methyl]-N-[4-[[4-methylpiperazin-1-yl)amino]methyl]-N-[4-[[4-methylpiperazin-1-yl)amino]methyl]-N-[4-[[4-methylpiperazin-1-yl]amino]methyl]-N-[4-[[4-methylpiperazin-1-yl]amino]methyl]-N-[4-[[4-methylpiperazin-1-yl]amino]methyl]-N-[4-[[4-methylpiperazin-1-yl]amino]methyl]-N-[4-[[4-methylpiperazin-1-yl]amino]methyl]-N-[4-[[4-methylpiperazin-1-yl]amino]methyl]-N-[4-[[4-methylpiperazin-1-yl]amino]methyl]-N-[4-[[4-methylpiperazin-1-yl]amino]methyl]-N-[4-[[4-methylpiperazin-1-yl]amino]methyl]-N-[4-[[4-methylpiperazin-1-yl]amino]methyl]-N-[4-[[4-methylpiperazin-1-yl]amino]methyl]-N-[4-[[4-methylpiperazin-1-yl]amino]methyl]-N-[4-[[4-methylpiperazin-1-yl]amino]methyl]-N-[4-[[4-methylpiperazin-1-yl]amino]methylpiperazin-1-yl]amino]methylpiperazin-1-yl]amino[[4-methylpiperazin-1-yl]amino]methylpiperazin-1-yl]amino[[4-methylpiperazin-1-yl]amino[[4-methylpiperazin-1-yl]amino[[4-methylpiperazin-1-yl]amino[[4-methylpiperazin-1-yl]amino[[4-methylpiperazin-1-yl]amino[[4-methylpiperazin-1-yl]amino[[4-methylpiperazin-1-yl]amino[[4-methylpiperazin-1-yl]amino[[4-methylpiperazin-1-yl]amino[[4-methylpiperazin-1-yl]amino[[4-methylpiperazin-1-yl]amino[[4-methylpiperazin-1-yl]amino[[4-methylpiperazin-1-yl]amino[[4-methylpiperazin-1-yl]amino[[4-methylpiperazin-1-yl]amino[[4-methylpiperazin-1-yl]amino[[4-methylpiperazin-1-yl]amino[[4-methylpiperazin-1-yl]amino[[4-methylpiperazin-1-yl]amino[[4-methylpiperazin-1-yl]amino[[4-methylpiperazin-1-yl]amino[[4-methylpiperazin-1-yl]amino[[4-methylpiperazin-1-yl]amino[[4-methylpiperazin-1-yl]amino[[4-methylpiperazin-1-yl]amino[[4-methylpiperazin-1-yl]amino[[4-methylpiperazin-1-yl]amino[[4-methylpiperazin-1-yl]amino[[4-methylpiperazin-1-yl]amino[[4-methylpiperazin-1-yl]amino[[4-methylpiperazin-1-yl]amino[[4-methylpiperazin-1-yl]amino[[4-methylpiperazin-1-yl]amino[[4-methylpiperazin-1-yl]amino[[4-methylpiperazin-1-yl]amino[[4-methylpiperazin-1-yl]amino[[4-methylpiper
                   (pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide methanesulfonate
                  796738-60-8P, 4-[(4-Methylhomopiperazin-1-yl)methyl]-N-[4-[[4-
                   (pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide acetate
                  796738-62-0P, 4-[(4-Methylpiperazin-1-yl)amino]methyl]-N-[4-
                  methyl-3-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide acetate
                  796738-63-1P, 4-[(4-Methylpiperazin-1-yl)amino]methyl]-N-[4-[(4-
                   (pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide acetate
                  796738-64-2P, 4-[(4-Methylhomopiperazin-1-yl)methyl]-N-[4-[[4-Methylhomopiperazin-1-yl)methyl]-N-[4-[[4-Methylhomopiperazin-1-yl]methyl]-N-[4-[[4-Methylhomopiperazin-1-yl]methyl]-N-[4-[[4-Methylhomopiperazin-1-yl]methyl]-N-[4-[[4-Methylhomopiperazin-1-yl]methyl]-N-[4-[[4-Methylhomopiperazin-1-yl]methyl]-N-[4-[[4-Methylhomopiperazin-1-yl]methyl]-N-[4-[[4-Methylhomopiperazin-1-yl]methyl]-N-[4-[[4-Methylhomopiperazin-1-yl]methyl]-N-[4-[[4-Methylhomopiperazin-1-yl]methyl]-N-[4-[[4-Methylhomopiperazin-1-yl]methyl]-N-[4-[[4-Methylhomopiperazin-1-yl]methyl]-N-[4-[[4-Methylhomopiperazin-1-yl]methyl]-N-[4-[[4-Methylhomopiperazin-1-yl]methyl]-N-[4-[[4-Methylhomopiperazin-1-yl]methyl]-N-[4-[[4-Methylhomopiperazin-1-yl]methyl]-N-[4-[[4-Methylhomopiperazin-1-yl]methyl]-N-[4-[[4-Methylhomopiperazin-1-yl]methyl]-N-[4-[[4-Methylhomopiperazin-1-yl]methyl]-N-[4-[[4-Methylhomopiperazin-1-yl]methyl]-N-[4-[[4-Methylhomopiperazin-1-yl]methyl]-N-[4-[[4-Methylhomopiperazin-1-yl]methyl]-N-[4-[[4-Methylhomopiperazin-1-yl]methyl]-N-[4-[[4-Methylhomopiperazin-1-yl]methyl]-N-[4-[[4-Methylhomopiperazin-1-yl]methyl]-N-[4-[[4-Methylhomopiperazin-1-yl]methyl]-N-[4-[[4-Methylhomopiperazin-1-yl]methyl]-N-[4-[[4-Methylhomopiperazin-1-yl]methyl]-N-[4-[[4-Methylhomopiperazin-1-yl]methyl]-N-[4-[[4-Methylhomopiperazin-1-yl]methyl]-N-[4-[[4-Methylhomopiperazin-1-yl]methyl]-N-[4-[[4-Methylhomopiperazin-1-yl]methyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllmethyllme
                   (pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide hydrochloride
                  796738-65-3P, 4-[[(4-Methylpiperazin-1-yl)amino]methyl]-N-[4-
                  methyl-3-[[4-(pyridin-3-yl)pyrimidin-2-yl]amino]phenyl]benzamide
                  hydrochloride 796738-66-4P, 4-[[(4-Methylpiperazin-1-
                  yl)amino]methyl]-N-[4-[[4-(pyridin-3-yl)pyrimidin-2-
                  yl]amino]phenyl]benzamide hydrochloride
                  RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
                   (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
                   (Uses)
                              (drug candidate; preparation of phenylpyrimidinamine derivs. related to
                             imatinib mesylate as antitumor agents)
RN
                  796738-29-9 CAPLUS
CN
                  Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[2-methyl-5-[[4-(3-
                  pyridinyl)-2-pyrimidinyl]amino]phenyl]-, methanesulfonate (9CI) (CA INDEX
                  NAME)
                  CM
                                    1
                  CRN
                                    796738-28-8
                  CMF
                                    C29 H32 N8 O
                                                                                                                   - NH
                                               ин-сн2
                                                                                                                       Me
```

CM 2

Me

CRN 75-75-2 CMF C H4 O3 S

RN 796738-35-7 CAPLUS

CN Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, methanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 796738-34-6 CMF C28 H30 N8 O

$$\begin{array}{c|c} & & & \\ &$$

CM 2

CRN 75-75-2 CMF C H4 O3 S

RN 796738-37-9 CAPLUS

CN Benzamide, $4-\{(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)methyl]-N-[3-methyl-4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, methanesulfonate (9CI) (CA INDEX NAME)$

CM 1

CRN 796738-36-8 CMF C30 H33 N7 O

CM 2

CRN 75-75-2 CMF C H4 O3 S

RN 796738-39-1 CAPLUS

CN Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[3-methyl-4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, methanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 796738-38-0 CMF C29 H32 N8 O

$$\begin{array}{c} \text{Me} \\ \text{N} \\ \text$$

CM 2

CRN 75-75-2 CMF C H4 O3 S

RN 796738-43-7 CAPLUS

CN Benzamide, N-[4-methoxy-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4[[(4-methyl-1-piperazinyl)amino]methyl]-, methanesulfonate (9CI) (CA
INDEX NAME)

CM 1

CRN 796738-42-6 CMF C29 H32 N8 O2

CM 2

CRN 75-75-2 CMF C H4 O3 S

RN 796738-51-7 CAPLUS

CN Benzamide, N-[2-fluoro-5-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4-[[(4-methyl-1-piperazinyl)amino]methyl]-, methanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 796738-50-6 CMF C28 H29 F N8 O

$$\begin{array}{c|c} & & & \\ &$$

2 CM

75-75-2 CRN CMF C H4 O3 S

RN

796738-53-9 CAPLUS Benzamide, 4-[(4-methyl-1-piperazinyl)amino]methyl]-N-[4-[[4-(3-methyl-1-piperazinyl)amino]methyl]-N-[4-[[4-(3-methyl-1-piperazinyl)amino]methyl]-N-[4-[[4-(3-methyl-1-piperazinyl)amino]methyl]-N-[4-[[4-(3-methyl-1-piperazinyl)amino]methyl]-N-[4-[[4-(3-methyl-1-piperazinyl)amino]methyl]-N-[4-[[4-(3-methyl-1-piperazinyl)amino]methyl]-N-[4-[[4-(3-methyl-1-piperazinyl)amino]methyl]-N-[4-[[4-(3-methyl-1-piperazinyl)amino]methyl]-N-[4-[[4-(3-methyl-1-piperazinyl)amino]methyl]-N-[4-[[4-(3-methyl-1-piperazinyl)amino]methyl]-N-[4-[[4-(3-methyl-1-piperazinyl)amino]methyl]-N-[4-[[4-(3-methyl-1-piperazinyl)amino]methyl]-N-[4-[[4-(3-methyl-1-piperazinyl)amino]methyl]-N-[4-[[4-(3-methyl-1-piperazinyl)amino]methyl]-N-[4-[[4-(3-methyl-1-piperazinyl)amino]methyl]-N-[4-(3-methyl-1-piperazinyl)amino]methyl]-N-[4-(3-methyl-1-piperazinyl)amino]methyl]-N-[4-(3-methyl-1-piperazinyl)amino]methyl]-N-[4-(3-methyl-1-piperazinyl)amino]methyl]-N-[4-(3-methyl-1-piperazinyl)amino]methyl]-N-[4-(3-methyl-1-piperazinyl)amino]methyl]-N-[4-(3-methyl-1-piperazinyl)amino]methyl]-N-[4-(3-methyl-1-piperazinyl)amino]methyl]-N-[4-(3-methyl-1-piperazinyl)amino]methyl-1-[4-(3-methyl-1-piperazinyl)amino]methyl-CN pyridinyl)-2-pyrimidinyl]amino]phenyl]-, methanesulfonate (9CI) (CA INDEX NAME)

CM1

CRN 796738-52-8 C28 H30 N8 O CMF

CM2

CRN 75-75-2 CMF C H4 O3 S

796738-60-8 CAPLUS RN

CN Benzamide, 4-[(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)methyl]-N-[4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, acetate (9CI) (CA INDEX NAME)

CM 1

CRN 796738-30-2 CMF C29 H31 N7 O

CM 2

CRN 64-19-7 CMF C2 H4 O2

RN 796738-62-0 CAPLUS

CN Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, acetate (9CI) (CA INDEX NAME)

CM 1

CRN 796738-23-3 CMF C29 H32 N8 O

$$\begin{array}{c|c} O \\ \hline C \\ NH \\ \hline NH \\ CH_2 \\ \hline \\ Me \\ \end{array}$$

CM 2

CRN 64-19-7 CMF C2 H4 O2

RN 796738-63-1 CAPLUS

CN Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, acetate (9CI) (CA INDEX NAME)

CM 1

011 1

CRN 796738-52-8 CMF C28 H30 N8 O

$$\begin{array}{c|c} & & & \\ &$$

CM 2

CRN 64-19-7

CMF C2 H4 O2

RN 796738-64-2 CAPLUS

CN Benzamide, 4-[(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)methyl]-N-[4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, hydrochloride (9CI) (CA INDEX NAME)

•x HCl

RN 796738-65-3 CAPLUS

CN Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, hydrochloride (9CI) (CA INDEX NAME)

•x HCl

NAME)

RN 796738-66-4 CAPLUS
CN Benzamide, 4-[[(4-methyl-1-piperazinyl)amino]methyl]-N-[4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, hydrochloride (9CI) (CA INDEX

●x HCl

IT 404844-11-7P, N-[5-[[4-(Chloromethyl)benzoyl]amino]-2methylphenyl]-4-(3-pyridyl)-2-pyrimidineamine 475587-06-5P, N-[3-[4-(Chloromethyl)benzoyl]amino]phenyl]-4-(3-pyridyl)-2pyrimidineamine 796738-69-7P, N-[5-[4-(Chloromethyl)benzoyl]amino]-4-methylphenyl]-4-(3-pyridyl)-2pyrimidineamine 796738-70-0P, N-[4-[[4-(Chloromethyl)benzoyl]amino]phenyl]-4-(3-pyridyl)-2-pyrimidineamine 796738-74-4P, N-[4-[[4-(Chloromethyl)benzoyl]amino]-2methylphenyl]-4-(3-pyridyl)-2-pyrimidineamine 796738-79-9P, N-[5-[[4-(Chloromethyl)benzoyl]amino]-2-methoxyphenyl]-4-(3-pyridyl)-2pyrimidineamine 796738-84-6P, N-[3-[[4-(Chloromethyl)benzoyl]amino]-4-fluorophenyl]-4-(3-pyridyl)-2pyrimidineamine RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (intermediate; preparation of phenylpyrimidinamine derivs. related to imatinib mesylate as antitumor agents) RN 404844-11-7 CAPLUS Benzamide, 4-(chloromethyl)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-CN pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 475587-06-5 CAPLUS

CN Benzamide, 4-(chloromethyl)-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 796738-69-7 CAPLUS

CN Benzamide, 4-(chloromethyl)-N-[2-methyl-5-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 796738-70-0 CAPLUS

CN Benzamide, 4-(chloromethyl)-N-[4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 796738-74-4 CAPLUS

CN Benzamide, 4-(chloromethyl)-N-[3-methyl-4-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 796738-79-9 CAPLUS

CN Benzamide, 4-(chloromethyl)-N-[4-methoxy-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 796738-84-6 CAPLUS

CN Benzamide, 4-(chloromethyl)-N-[2-fluoro-5-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L10
        ANSWER 24 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN
AN
         2004:964826 CAPLUS
DN
         141:410958
         Preparation of 2-phenylaminopyrimidine derivatives as tyrosine kinase
TΙ
         inhibitors for treatment of cancers
IN
         Chen, Guoging P.
PA
SO
         U.S. Pat. Appl. Publ., 25 pp.
        CODEN: USXXCO
DT
         Patent
LA
        English
FAN.CNT 1
        PATENT NO.
                                          KIND
                                                      DATE
                                                                          APPLICATION NO.
                                                                                                                 DATE
                                           ____
                                                                          -----
PΙ
        US 2004224967
                                           Α1
                                                                          US 2004-821382
                                                      20041111
                                                                                                                 20040409
         US 7232825
                                            B2
                                                      20070619
PRAI US 2003-466883P
                                            Ρ
                                                      20030502
        MARPAT 141:410958
OS
AB
        The present invention relates to phenylaminopyrimidine derivs. (I) [X = 0,
        S; Y = a direct bond, O, N, lower alkyl; Z = an aliphatic, cycloaliph., aryl
        or a heterocyclyl radical; R1 = heterocyclyl; R2 = H, halogen, halo-lower
        alkyl, lower alkyl, lower alkoxy; R3 = H, lower alkyl; R4 = oxy-lower
        alkylamino, lower alkoxy-lower alkylamino, oxyheterocyclyl, lower alkyl
        oxyheterocyclyl, oxy-lower alkylheterocyclyl, lower alkyl oxy-lower
        alkylheterocyclyl, halo-lower alkylamino, halo-lower alkylheterocyclyl,
        amino-lower alkylamino, lower alkylamino lower alkylamino,
        aminoheterocyclyl, lower alkylaminoheterocyclyl, amino-lower alkylheterocyclyl, lower alkylamino-lower alkylheterocyclyl] or
        pharmaceutically acceptable salts thereof, processes for their preparation,
        pharmaceutical compns. containing them as active ingredient, methods for the
        treatment of disease states such as cancers associated with tyrosine kinases,
         especially Bcr-Abl, to their use as medicaments and to their use in the
manufacture
        of medicaments for use in the production of inhibition of tyrosine kinase
        reducing effects in warm-blooded animals such as humans. Thus, Mitsunobu
        reaction of N-(tert-butoxycarbonyl)aminoethanol and 4-hydroxy-N-[4-methyl-
         3-[[4-(3-pyridyl)pyrimidin-2-yl]amino]phenyl]benzamide in CH2Cl2 at room
        temperature for 4 h gave 4-[2-(tert-butoxycarbonylamino)ethoxy]-N-[4-methyl-3-
         [[4-(3-pyridyl)pyrimidin-2-yl]amino]phenyl]benzamide which was treated
        with 4 N HCl/dioxane, evaporated, mixed with NaHCO3, and extracted with EtOAc
to
        give 4-(2-\text{aminoethoxy})-N-[4-\text{methyl}-3-[[4-(3-\text{pyridyl})\text{pyrimidin}-2-
        yl]amino]phenyl]benzamide. No biol. data for the compds. I were given.
IT
        623900-99-2P, 4-Nitro-N-[4-methyl-3-[[4-(3-pyridyl)pyrimidin-2-
        yl]amino]phenyl]benzamide 791609-55-7P, 4-Hydroxy-N-[4-methyl-3-
        [[4-(3-pyridyl)pyrimidin-2-yl]amino]phenyl]benzamide 791609-57-9P
        pyridyl)pyrimidin-2-yl]amino]phenyl]benzamide 791609-64-8P,
        N-[4-Methyl-3-[[4-(3-pyridyl)pyrimidin-2-yl]amino]phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino[phenyl]-4-(1-yl)mino
        benzylpyrrolidin-3-ylamino)benzamide 791609-70-6P,
        4-[Fluoro(1-benzylpyrrolidin-3-ylamino)methyl]-N-[4-methyl-3-[[4-(3-
        pyridyl)pyrimidin-2-yl]amino]phenyl]benzamide 791609-83-1P,
        4-(Aminomethyl)-N-(4-methyl-3-[[4-(3-pyridyl)pyrimidin-2-
        yl]amino]phenyl]benzamide
        RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
         (Reactant or reagent)
              (intermediate; preparation of 2-phenylaminopyrimidine derivs. as tyrosine
             kinase inhibitors for treatment of cancers)
        623900-99-2 CAPLUS
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Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4-

RN CN nitro- (9CI) (CA INDEX NAME)

$$\bigcap_{O_2N} \bigcap_{C-NH} \bigcap_{Me} \bigcap_{N} \bigcap_{$$

RN 791609-55-7 CAPLUS

CN Benzamide, 4-hydroxy-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 791609-57-9 CAPLUS

CN Carbamic acid, [2-[4-[[[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]amino]carbonyl]phenoxy]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

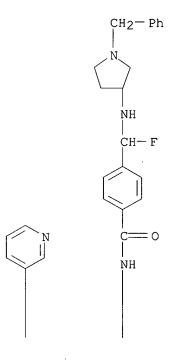
RN 791609-64-8 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4-[[1-(phenylmethyl)-3-pyrrolidinyl]amino]- (CA INDEX NAME)

RN 791609-70-6 CAPLUS

CN Benzamide, 4-[fluoro[[1-(phenylmethyl)-3-pyrrolidinyl]amino]methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

RN 791609-83-1 CAPLUS
CN Benzamide, 4-(aminomethyl)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

$$\begin{array}{c|c} O \\ C - NH \\ \hline \end{array}$$

$$\begin{array}{c|c} NH \\ N \\ \hline \end{array}$$

$$\begin{array}{c|c} NH \\ N \\ \hline \end{array}$$

ΙT pyridyl)pyrimidin-2-yl]amino]phenyl]benzamide 791609-58-0P, methylpyrrolidin-3-yl)amino]benzamide 791609-62-6P, methylpyrrolidin-2-yl)methoxy]benzamide 791609-63-7P, N-[4-Methyl-3-[[4-(3-pyridyl)pyrimidin-2-yl]amino]phenyl]-4-(pyrrolidin-3ylamino)benzamide 791609-65-9P, 4-(Aminofluoromethyl)-N-[4methyl-3-[[4-(3-pyridyl)pyrimidin-2-yl]amino]phenyl]benzamide 791609-67-1P, 4-(Aminodifluoromethyl)-N-[4-methyl-3-[[4-(3- $\frac{1}{2}$)] pyridyl)pyrimidin-2-yl]amino]phenyl]benzamide 791609-68-2P, 4-[Methyl(1-methylpyrrolidin-3-yl)amino]-N-[4-methyl-3-[[4-(3-methyl-3-[[4-(3-methyl-3-[[4-(3-methyl-3-[3-methylpyridyl)pyrimidin-2-yl]amino]phenyl]benzamide 791609-69-3P, 4-[Fluoro[(1-methylpyrrolidin-3-yl)amino]methyl]-N-[4-methyl-3-[[4-(3-yl)amino]methyl]]pyridyl)pyrimidin-2-yl]amino]phenyl]benzamide 791609-71-7P, pyridyl)pyrimidin-2-yl]amino]phenyl]benzamide 791609-74-0P, pyridyl)pyrimidin-2-yl]amino]phenyl]benzamide 791609-75-1P, 4-[Fluoro[N-methyl(1-methylpyrrolidin-3-yl)amino]methyl]-N-[4-methyl-3-[[4-(3-pyridyl)pyrimidin-2-yl]amino]phenyl]benzamide 791609-76-2P, 4-[Fluoro(pyrrolidin-3-ylamino)methyl]-N-[4-methyl-3-[[4-(3pyridyl)pyrimidin-2-yl]amino]phenyl]benzamide 791609-79-5P, 4-[Difluoro[methyl(1-methylpyrrolidin-3-yl)amino]methyl]-N-[4-methyl-3-[[4-(3-pyridyl)pyrimidin-2-yl]amino]phenyl]benzamide 791609-80-8P, pyridyl)pyrimidin-2-yl]amino]phenyl]benzamide 791609-81-9P, 4-[Difluoro(pyrrolidin-3-ylamino)methyl]-N-[4-methyl-3-[[4-(3pyridyl)pyrimidin-2-yl]amino]phenyl]benzamide 791609-82-0P, 4-[[Methyl(1-methylpyrrolidin-3-yl)amino]methyl]-N-[4-methyl-3-[[4-(3-yl)amino]methyl]]pyridyl)pyrimidin-2-yl]amino]phenyl]benzamide 791609-84-2P, 4-[(1-Methylpyrrolidin-3-yl)amino]methyl]-N-[4-methyl-3-[[4-(3-yl)amino]methyl]N-[4-methyl-3-[[4-(3-yl)amino]methyl]N-[4-methyl-3-[[4-(3-yl)amino]methyl]N-[4-methyl-3-[[4-(3-yl)amino]methyl]N-[4-methyl-3-[[4-(3-yl)amino]methyl]N-[4-methyl-3-[[4-(3-yl)amino]methyl]N-[4-methyl-3-[[4-(3-yl)amino]methyl]N-[4-methyl-3-[4-methyl-3-[4-(3-yl)amino]methyl]N-[4-methyl-3-[4-(3-yl)amino]methyl]N-[4-methyl-3-[4-(3-yl)amino]methyl]N-[4-methyl-3-[4-(3-yl)amino]methyl]N-[4-methyl-3-[4-(3-yl)amino]methyl]N-[4-methyl-3-[4-(3-yl)amino]methyl]N-[4-methyl-3-[4-(3-yl)amino]methyl]N-[4-methyl-3-[4-(3-yl)amino]methyl]N-[4-(3-yl)amino]methyllapyridyl)pyrimidin-2-yl]amino]phenyl]benzamide 791609-85-3P, 4-[(Pyrrolidin-3-ylamino)methyl]-N-[4-methyl-3-[[4-(3-pyridyl)pyrimidin-2yl]amino]phenyl]benzamide 791609-87-5P, 4-(2-Aminoethoxy)-N-[4methyl-3-[[4-(3-pyridyl)pyrimidin-2-yl]amino]phenyl]benzamide

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methanesulfonate 791609-88-6P, N-[4-Methyl-3-[[4-(3-
pyridyl)pyrimidin-2-yl]amino]phenyl]-4-[(1-methylpyrrolidin-3-
yl)amino]benzamide methanesulfonate 791609-90-0P,
N-[4-Methyl-3-[[4-(3-pyridyl)pyrimidin-2-yl]amino]phenyl]-4-[(1-yridyl)pyrimidin-2-yl]amino]phenyl]-4-[(1-yridyl)pyrimidin-2-yl]amino]phenyl]-4-[(1-yridyl)pyrimidin-2-yl]amino]phenyl]-4-[(1-yridyl)pyrimidin-2-yl]amino]phenyl]-4-[(1-yridyl)pyrimidin-2-yl]amino]phenyl]-4-[(1-yridyl)pyrimidin-2-yl]amino]phenyl]-4-[(1-yridyl)pyrimidin-2-yl]amino]phenyl]-4-[(1-yridyl)pyrimidin-2-yl]amino]phenyl]-4-[(1-yridyl)pyrimidin-2-yl]amino]phenyl]-4-[(1-yridyl)pyrimidin-2-yl]amino]phenyl]-4-[(1-yridyl)pyrimidin-2-yl]amino]phenyl]-4-[(1-yridyl)pyrimidin-2-yl]amino]phenyl]-4-[(1-yridyl)pyrimidin-2-yl]amino]phenyl]-4-[(1-yridyl)pyrimidin-2-yl]amino]phenyl]-4-[(1-yridyl)pyrimidin-2-yl]amino]phenyl]-4-[(1-yridyl)pyrimidin-2-yridyl]amino]phenyl]-4-[(1-yridyl)pyrimidin-2-yridyl]amino]phenyl]-4-[(1-yridyl)pyrimidin-2-yridyl]amino]phenyl]-4-[(1-yridyl)pyrimidin-2-yridyl]amino[[yridyl]pyrimidin-2-yridyl]amino[[yridyl]pyrimidin-2-yridyl]amino[[yridyl]pyrimidin-2-yridyl]amino[[yridyl]pyrimidin-2-yridyl]amino[[yridyl]pyrimidin-2-yridyl]amino[[yridyl]pyrimidin-2-yridyl]amino[[yridyl]pyrimidin-2-yridyl]amino[[yridyl]pyrimidin-2-yridyl]amino[[yridyl]pyrimidin-2-yridyl]amino[[yridyl]pyrimidin-2-yridyl]amino[[yridyl]pyrimidin-2-yridyl]amino[[yridyl]pyrimidin-2-yridyl]amino[[yridyl]pyrimidin-2-yridyl]amino[[yridyl]pyrimidin-2-yridyl]amino[[yridyl]pyrimidin-2-yridyl]amino[[yridyl]pyrimidin-2-yridyl]amino[[yridyl]pyrimidin-2-yridyl]amino[[yridyl]pyrimidin-2-yridyl]amino[[yridyl]pyrimidin-2-yridyl]amino[[yridyl]pyrimidin-2-yridyl]amino[[yridyl]pyrimidin-2-yridyl]amino[[yridyl]pyrimidin-2-yridyl]amino[[yridyl]pyrimidin-2-yridyl]amino[[yridyl]pyrimidin-2-yridyl]amino[[yridyl]pyrimidin-2-yridyl]amino[[yridyl]pyrimidin-2-yridyl]amino[[yridyl]pyrimidin-2-yridyl]amino[[yridyl]pyrimidin-2-yridyl]amino[[yridyl]pyrimidin-2-yridyl]amino[[yridyl]pyrimidin-2-yridyl]amino[[yridyl]pyrimidin-2-yridyl]amino[[yridyl]pyrimidin-2-yridyl]amino[[yridyl]pyrimidin-2-yridyl]amino[[yridyl]pyrimidin-2-yridyl]amino[[yridyl]pyrimidin-2-yridyl]amino[[yridyl]pyrimidin-2-yridy
methylpyrrolidin-2-yl)methoxy]benzamide methanesulfonate
791609-91-1P, N-[4-Methyl-3-[[4-(3-pyridyl)pyrimidin-2-
yl]amino]phenyl]-4-(pyrrolidin-3-ylamino)benzamide methanesulfonate
791609-92-2P, 4-(Aminofluoromethyl)-N-[4-methyl-3-[[4-(3-
pyridyl)pyrimidin-2-yl]amino]phenyl]benzamide methanesulfonate
791609-94-4P, 4-(Aminodifluoromethyl)-N-[4-methyl-3-[[4-(3-
pyridyl)pyrimidin-2-yl]amino]phenyl]benzamide methanesulfonate
791609-95-5P, 4-[Methyl(1-methylpyrrolidin-3-yl)amino]-N-[4-methyl-
3-[[4-(3-pyridyl)pyrimidin-2-yl]amino]phenyl]benzamide methanesulfonate
791609-97-7P, 4-[Fluoro(1-methylpyrrolidin-3-ylamino)methyl]-N-[4-
methyl-3-[[4-(3-pyridyl)pyrimidin-2-yl]amino]phenyl]benzamide
methanesulfonate 791609-98-8P, 4-[[[2-
(Dimethylamino)ethyl]amino]fluoromethyl]-N-[4-methyl-3-[[4-(3-methylamino)ethyl]]
pyridyl)pyrimidin-2-yl]amino]phenyl]benzamide methanesulfonate
791610-01-0P, 4-[[[2-(Dimethylamino)ethyl]amino]difluoromethyl]-N-
[4-methyl-3-[[4-(3-pyridyl)pyrimidin-2-yl]amino]phenyl]benzamide
methanesulfonate 791610-02-1P, 4-[Fluoro[methyl(1-
methylpyrrolidin-3-yl) amino] methyl]-N-[4-methyl-3-[[4-(3-pyridyl)] pyrimidin-3-yl)
2-yl]amino]phenyl]benzamide methanesulfonate 791610-03-2P,
4-[Fluoro(pyrrolidin-3-ylamino)methyl]-N-[4-methyl-3-[4-(3-
pyridyl)pyrimidin-2-yl]amino]phenyl]benzamide methanesulfonate
791610-06-5P, 4-[Difluoro[methyl(1-methylpyrrolidin-3-
yl) amino]methyl] -N-[4-methyl-3-[[4-(3-pyridyl)pyrimidin-2-methyl]]
yl]amino]phenyl]benzamide methanesulfonate 791610-07-6P,
4-[Difluoro(1-methylpyrrolidin-3-ylamino)methyl]-N-[4-methyl-3-[[4-(3-
pyridyl)pyrimidin-2-yl]amino]phenyl]benzamide methanesulfonate
791610-08-7P, 4-[Difluoro(pyrrolidin-3-ylamino)methyl]-N-[4-methyl-
3-[[4-(3-pyridyl)pyrimidin-2-yl]amino]phenyl]benzamide methanesulfonate
791610-09-8P, 4-[[Methyl(1-methylpyrrolidin-3-yl)amino]methyl]-N-
\hbox{\tt [4-methyl-3-[[4-(3-pyridyl)pyrimidin-2-yl]amino]phenyl]} benzamide
methanesulfonate 791610-10-1P, 4-[[(1-Methylpyrrolidin-3-
yl) amino]methyl] -N-[4-methyl-3-[[4-(3-pyridyl)pyrimidin-2-
yl]amino]phenyl]benzamide methanesulfonate 791610-11-2P,
 4-[(Pyrrolidin-3-ylamino)methyl]-N-[4-methyl-3-[[4-(3-pyridyl)pyrimidin-2-1]] + (3-pyridyl)pyrimidin-2-1] + (3-pyridyl)pyrimidin-2-1 + (3-pyridyl)pyrimid
yl]amino]phenyl]benzamide methanesulfonate
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
        (preparation of 2-phenylaminopyrimidine derivs. as tyrosine kinase
       inhibitors for treatment of cancers)
791609-56-8 CAPLUS
Benzamide, 4-(2-aminoethoxy)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-
pyrimidinyl]amino]phenyl]- (CA INDEX NAME)
```

RN

CN

RN 791609-58-0 CAPLUS
CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4[(1-methyl-3-pyrrolidinyl)amino]- (CA INDEX NAME)

RN 791609-62-6 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4-[(1-methyl-2-pyrrolidinyl)methoxy]- (CA INDEX NAME)

RN 791609-63-7 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4-(3-pyrrolidinylamino)- (CA INDEX NAME)

RN 791609-65-9 CAPLUS

CN Benzamide, 4-(aminofluoromethyl)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

$$\begin{array}{c|c} O & \\ \hline C - NH & NH \\ \hline NH & N \\ \hline \end{array}$$

RN 791609-67-1 CAPLUS

CN Benzamide, 4-(aminodifluoromethyl)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & \circ & \\ \hline \\ H_2N-CF_2 \end{array}$$

RN 791609-68-2 CAPLUS

CN Benzamide, 4-[methyl(1-methyl-3-pyrrolidinyl)amino]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 791609-69-3 CAPLUS

CN Benzamide, 4-[fluoro[(1-methyl-3-pyrrolidinyl)amino]methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

RN 791609-71-7 CAPLUS

CN Benzamide, 4-[[[2-(dimethylamino)ethyl]amino]fluoromethyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 791609-74-0 CAPLUS

CN Benzamide, 4-[[[2-(dimethylamino)ethyl]amino]difluoromethyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 791609-75-1 CAPLUS

CN Benzamide, 4-[fluoro[methyl(1-methyl-3-pyrrolidinyl)amino]methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

RN 791609-76-2 CAPLUS

CN Benzamide, 4-[fluoro(3-pyrrolidinylamino)methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

| Me

RN 791609-79-5 CAPLUS

CN Benzamide, 4-[difluoro[methyl(1-methyl-3-pyrrolidinyl)amino]methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

RN 791609-80-8 CAPLUS

CN Benzamide, 4-[difluoro[(1-methyl-3-pyrrolidinyl)amino]methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

PAGE 2-A

RN 791609-81-9 CAPLUS

CN Benzamide, 4-[difluoro(3-pyrrolidinylamino)methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

PAGE 2-A

| Me

RN 791609-82-0 CAPLUS

CN Benzamide, 4-[[methyl(1-methyl-3-pyrrolidinyl)amino]methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

PAGE 2-A

RN 791609-84-2 CAPLUS
CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4[[(1-methyl-3-pyrrolidinyl)amino]methyl]- (CA INDEX NAME)

PAGE 2-A

RN 791609-85-3 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4-[(3-pyrrolidinylamino)methyl]- (CA INDEX NAME)

PAGE 2-A

| Me

RN 791609-87-5 CAPLUS

Benzamide, 4-(2-aminoethoxy)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, methanesulfonate (9CI) (CA INDEX NAME)

CM 1

CN

CRN 791609-56-8 CMF C25 H24 N6 O2

CM 2

RN 791609-88-6 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4-[(1-methyl-3-pyrrolidinyl)amino]-, methanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 791609-58-0 CMF C28 H29 N7 O

CM 2

CRN 75-75-2 CMF C H4 O3 S

RN 791609-90-0 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4- [(1-methyl-2-pyrrolidinyl)methoxy]-, methanesulfonate (9CI) (CA INDEX

NAME)

CM 1

CRN 791609-62-6 CMF C29 H30 N6 O2

CM 2

CRN 75-75-2 CMF C H4 O3 S

RN 791609-91-1 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4-(3-pyrrolidinylamino)-, methanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 791609-63-7 CMF C27 H27 N7 O

CRN 75-75-2 CMF C H4 O3 S

RN 791609-92-2 CAPLUS

CN Benzamide, 4-(aminofluoromethyl)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, methanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 791609-65-9 CMF C24 H21 F N6 O

$$\begin{array}{c|c} & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ \end{array}$$

CM 2

CRN 75-75-2 CMF C H4 O3 S

RN 791609-94-4 CAPLUS

CN Benzamide, 4-(aminodifluoromethyl)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, methanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 791609-67-1 CMF C24 H20 F2 N6 O

$$H_2N-CF_2$$

O

 $C-NH$
 NH
 N
 N
 N

CM 2

CRN 75-75-2 CMF C H4 O3 S

CN

RN 791609-95-5 CAPLUS

Benzamide, 4-[methyl(1-methyl-3-pyrrolidinyl)amino]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, methanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 791609-68-2 CMF C29 H31 N7 O

CRN 75-75-2 CMF C H4 O3 S

RN 791609-97-7 CAPLUS

CN Benzamide, 4-[fluoro[(1-methyl-3-pyrrolidinyl)amino]methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, methanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 791609-69-3 CMF C29 H30 F N7 O

PAGE 2-A

2 CM

CRN 75**-**75-2 CMF C H4 O3 S

RN 791609-98-8 CAPLUS

Benzamide, 4-[[[2-(dimethylamino)ethyl]amino]fluoromethyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, methanesulfonate (9CI) (CA INDEX NAME)CN

CRN 791609-71-7 CMF C28 H30 F N7 O

CM 2

CRN 75-75-2 CMF C H4 O3 S

RN 791610-01-0 CAPLUS

CN Benzamide, 4-[[[2-(dimethylamino)ethyl]amino]difluoromethyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, methanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 791609-74-0 CMF C28 H29 F2 N7 O

CM 2

RN 791610-02-1 CAPLUS

CN Benzamide, 4-[fluoro[methyl(1-methyl-3-pyrrolidinyl)amino]methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, methanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 791609-75-1 CMF C30 H32 F N7 O

PAGE 1-A

CRN 75-75-2 CMF C H4 O3 S

RN 791610-03-2 CAPLUS

CN Benzamide, 4-[fluoro(3-pyrrolidinylamino)methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, methanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 791609-76-2 CMF C28 H28 F N7 O

PAGE 1-A

PAGE 2-A

Me

CRN 75-75-2 CMF C H4 O3 S

RN 791610-06-5 CAPLUS

CN Benzamide, 4-[difluoro[methyl(1-methyl-3-pyrrolidinyl)amino]methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, methanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 791609-79-5 CMF C30 H31 F2 N7 O

PAGE 1-A

PAGE 2-A

CM 2

CRN 75-75-2 CMF C H4 O3 S

RN 791610-07-6 CAPLUS

CN Benzamide, 4-[difluoro[(1-methyl-3-pyrrolidinyl)amino]methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, methanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 791609-80-8 CMF C29 H29 F2 N7 O

PAGE 2-A

CM 2

CRN 75-75-2 CMF C H4 O3 S

RN 791610-08-7 CAPLUS

CN Benzamide, 4-[difluoro(3-pyrrolidinylamino)methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, methanesulfonate (9CI) (CA INDEX NAME)

CRN 791609-81-9 CMF C28 H27 F2 N7 O

PAGE 1-A

PAGE 2-A

| Me

CM 2

CRN 75-75-2 CMF C H4 O3 S

RN 791610-09-8 CAPLUS

CN Benzamide, 4-[[methyl(1-methyl-3-pyrrolidinyl)amino]methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-, methanesulfonate (9CI) (CA INDEX NAME)

CRN 791609-82-0 CMF C30 H33 N7 O

PAGE 1-A

PAGE 2-A

CM 2

RN 791610-10-1 CAPLUS

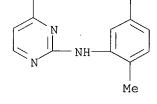
CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4[[(1-methyl-3-pyrrolidinyl)amino]methyl]-, methanesulfonate (9CI) (CA
INDEX NAME)

CM 1

CRN 791609-84-2 CMF C29 H31 N7 O

PAGE 1-A

PAGE 2-A



CM 2

RN 791610-11-2 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4-[(3-pyrrolidinylamino)methyl]-, methanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 791609-85-3 CMF C28 H29 N7 O

PAGE 1-A

PAGE 2-A

| Me

CM 2

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/528,913

L10 ANSWER 25 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2004:954402 CAPLUS

DN 142:147823

 ${\tt TI}$ Efficient optimization strategy for marginal hits active against abl tyrosine kinases

AU Tkachenko, Sergey E.; Okun, Ilya; Balakin, Konstantin V.; Petersen, Charles E.; Ivanenkov, Yan A.; Savchuk, Nikolay P.; Ivashchenko, Andrey A.

CS Chemical Diversity Labs, Inc., San Diego, CA, 92121, USA

SO Current Drug Discovery Technologies (2004), 1(3), 201-210 CODEN: CDDTAF; ISSN: 1570-1638

PB Bentham Science Publishers Ltd.

DT Journal

LA English

AB Primary high-throughput screening of com. available small mols. collections often results in hit compds. with unfavorable ADME/Tox properties and low IP potential. These issues are addressed empirically at follow-up lead development and optimization stages. In this work, we describe a rational approach to the optimization of hit compds. discovered during screening of a kinase focused library against abl tyrosine kinase. The optimization strategy involved application of modern chemoinformatics techniques, such as automatic bioisosteric transformation of the initial hits, efficient solution-phase combinatorial synthesis, and advanced methods of knowledge-based libraries design.

IT 152459-94-4, CGP-53716

RL: BSU (Biological study, unclassified); BIOL (Biological study) (efficient optimization strategy for marginal hits active against abl tyrosine kinases)

RN 152459-94-4 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 26 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN
L10
ΑN
     2004:533970 CAPLUS
DN
     141:65088
ΤI
     Methods and compositions for the prevention or treatment of neoplasia
     comprising a COX-2 inhibitor in combination with an epidermal growth
     factor receptor antagonist
ΙN
     Masferrer, Jaime
     Pharmacia Corporation, USA
PΑ
SO
     U.S. Pat. Appl. Publ., 103 pp., Cont.-in-part of U.S. Ser. No. 470,951.
     CODEN: USXXCO
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     English
FAN.CNT 21
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PΙ
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                                                                    20030829
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     WO 2005037259
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     WO 2005037259
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                                 20050804
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             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
             SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
             SN, TD, TG
     AU 2004210578
                          Α1
                                 20041007
                                            AU 2004-210578
                                                                    20040910
PRAI US 1998-113786P
                          Ρ
                                 19981223
     US 1999-470951
                          В2
                                 19991222
     US 1999-385214
                          Α
                                 19990827
     AU 2000-25936
                          ΑЗ
                                19991222
     EP 1999-968939
                          А3
                                19991222
     US 2003-651916
                          Α
                                 20030829
     The present invention relates to a novel method of preventing and/or
AB
     treating neoplasia disorders in a subject that is in need of such
     prevention or treatment by administering to the subject at least one COX-2
     inhibitor in combination with an EGF receptor antagonist. Compns.,
     pharmaceutical compns. and kits are also described.
IT
     152459-94-4, CGP-53716
     RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);
     THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (as EGFR antagonist; COX-2 inhibitor in combination with epidermal
        growth factor receptor antagonist for prevention or treatment of
        neoplasia)
     152459-94-4 CAPLUS
RN
CN
     Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-
     (CA INDEX NAME)
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10/528,913

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L10
      ANSWER 27 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN
ΑN
      2004:287838 CAPLUS
DN
      140:321373
      Preparation of novel pyrimidine amides as protein kinase inhibitors
ΤI
ΙN
      Manley, Paul William; Breitenstein, Werner; Jacob, Sandra; Furet, Pascal
PA
      Novartis Ag, Switz.; Novartis Pharma GmbH
SO
      PCT Int. Appl., 57 pp.
      CODEN: PIXXD2
DT
      Patent
LA
      English
FAN.CNT 1
      PATENT NO.
                           KIND
                                  DATE
                                             APPLICATION NO.
                                                                       DATE
                           ____
                                  _____
                                              -----
PΙ
     WO 2004029038
                           A1
                                  20040408
                                             WO 2003-EP10724
                                                                       20030926
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
              CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
              GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LT,
              LU, LV, MA, MD, MK, MN, MX, NI, NO, NZ, OM, PG, PH, PL, PT, RO,
              RU, SC, SE, SG, SK, SY, TJ, TM, TN, TR, TT, UA, US, UZ, VC, VN,
              YU, ZA, ZW
         RW: AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE,
              DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,
              SI, SK, TR
     CA 2499822
                            A1
                                  20040408
                                               CA 2003-2499822
                                                                       20030926
     AU 2003270277
                           Α1
                                  20040419
                                               AU 2003-270277
                                                                       20030926
     AU 2003270277
                           В2
                                  20070823
     EP 1546127
                           A1
                                  20050629
                                               EP 2003-750639
                                                                       20030926
     EP 1546127
                           В1
                                  20070808
              AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     BR 2003014797
                           Α
                                  20050726
                                              BR 2003-14797
                                                                       20030926
     CN 1684951
                           Α
                                               CN 2003-823213
                                  20051019
                                                                       20030926
     JP 2006508064
                                              JP 2004-539039
                           Τ
                                  20060309
                                                                       20030926
     AT: 369355
                           Τ
                                  20070815
                                              AT 2003-750639
                                                                       20030926
     ZA 2005002304
                           Α
                                  20060426
                                              ZA 2005-2304
                                                                       20050318
     MX 2005PA03253
                           Α
                                  20050608
                                              MX 2005-PA3253
                                                                       20050323
     IN 2005CN00464
                           Α
                                  20070406
                                              IN 2005-CN464
                                                                      20050323
     NO 2005001966
                                  20050422
                           A
                                              NO 2005-1966
                                                                      20050422
     US 2006142577
                           Α1
                                  20060629
                                              US 2006-528913
                                                                       20060105
PRAI GB 2002-22514
                           Α
                                  20020927
     WO 2003-EP10724
                           W
                                  20030926
     MARPAT 140:321373
OS
     The title substituted N-(3-benzoylaminophenyl)-4-pyridyl-2-pyrimidinamines
     [I; R1 = H and R2 = NR5R6, or R1 = NR5R6 and R2 = H; R3 = alkyl, fluoroalkyl, hydroxyalkyl, carbamoyl; R4 = H, alkyl, halo; R5 and R6 = H,
     alkyl, hydroxyalkyl, etc. or NR5R6 = (un)substituted (un)saturated 5-7
     membered ring optionally containing heteroatoms], useful for the therapy of a
     disease which responds to an inhibition of protein kinase activity, especially
а
     neoplastic disease (e.g., leukemia), were prepared and formulated.
     amidation of 4-methyl-N-[4-(3-pyridinyl)-2-pyrimidinyl]-1,3-benzenediamine
     with 4-diethylamino-3-(trifluoromethyl)benzoic acid (preparation given)
     afforded I [R1 = H; R2 = NEt2; R3 = CF3; R4 = Me] which showed IC50 of
     50-100 nM against c-Abl and IC50 of 200-500 nM against Bcr-Abl (in vitro
     inhibition data).
     677704-35-7P 677704-36-8P 677704-37-9P
ΙT
     677704-38-0P 677704-39-1P 677704-40-4P
     677704-41-5P 677704-42-6P 677704-43-7P
     677704-44-8P 677704-45-9P 677704-46-0P
     677704-47-1P 677704-48-2P 677704-49-3P
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677704-50-6P 677704-51-7P 677704-52-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of novel N-[3-(pyrimidin-2-ylamino)phenyl] benzamides as protein kinase inhibitors)

RN 677704-35-7 CAPLUS
CN Benzamide, 4-(dieth)

Benzamide, 4-(diethylamino)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 677704-36-8 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4-(1-pyrrolidinyl)-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 677704-37-9 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4-(4-morpholinyl)-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 677704-38-0 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4-(1-piperidinyl)-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 677704-39-1 CAPLUS

CN Benzamide, 4-(4-methyl-1-piperazinyl)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 677704-40-4 CAPLUS

CN Benzamide, 4-(1H-imidazol-1-yl)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 677704-41-5 CAPLUS

CN Benzamide, 4-(2-methyl-1H-imidazol-1-yl)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 677704-42-6 CAPLUS

CN Benzamide, 4-(4-methyl-1H-imidazol-1-yl)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 677704-43-7 CAPLUS

CN Benzamide, 4-(2,4-dimethyl-1H-imidazol-1-yl)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 677704-44-8 CAPLUS

CN Benzamide, 3-(1H-imidazol-1-yl)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 677704-45-9 CAPLUS

CN Benzamide, 3-(2-methyl-1H-imidazol-1-yl)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 677704-46-0 CAPLUS

CN Benzamide, 3-(4-methyl-1H-imidazol-1-yl)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 677704-47-1 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-3-(4-morpholinyl)-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 677704-48-2 CAPLUS

CN Benzamide, 3-(4-methyl-1-piperazinyl)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 677704-49-3 CAPLUS

CN Benzamide, 4-[[2-(dimethylamino)ethyl]methylamino]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 677704-50-6 CAPLUS

CN Benzamide, 4-[methyl(1-methyl-4-piperidinyl)amino]-N-[4-methyl-3-[[4-(3-methyl-3-methyl-3-[14-(3-methyl-4-piperidinyl)amino]]]

pyridiny1)-2-pyrimidiny1]amino]pheny1]-3-(trifluoromethy1)- (9C1) (CA INDEX NAME)

RN 677704-51-7 CAPLUS

CN Benzamide, 3-(ethylamino)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 677704-52-8 CAPLUS

CN Benzamide, 3-(acetylamino)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)

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ANSWER 28 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN
L10
ΑN
     2004:20664
                CAPLUS
DN
     140:77165
TΙ
     Preparation of 4-[(4-methylpiperazin-1-yl)methyl] benzamide for treatment
     Asaki, Tetsuo; Hamamoto, Taisuke; Sugiyama, Yukiteru
ΙN
     Nippon Shinyaku Co., Ltd., Japan
PA
SO
     PCT Int. Appl., 102 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     Japanese
FAN.CNT 1
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                   DATE
                         ____
                                -----
                                            -----
                                                                   -----
     WO 2004002963
                                         WO 2003-JP8192
PΙ
                         A1
                                20040108
                                                                   20030627
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
             PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
             TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     CA 2490907
                          A1
                                20040108
                                          CA 2003-2490907
                                                                   20030627
     AU 2003246100
                          A1
                                20040119
                                            AU 2003-246100
                                                                   20030627
     BR 2003012288
                          Α
                                20050412
                                            BR 2003-12288
                                                                   20030627
     EP 1533304
                          A1
                                20050525
                                            EP 2003-738555
                                                                   20030627
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     CN 1678590
                         Α
                                20051005
                                            CN 2003-820146
                                                                   20030627
     MX 2004PA12845
                         Α
                                            MX 2004-PA12845
                                20050224
                                                                   20041216
     US 2006014742
                         A1
                                20060119
                                            US 2004-519722
                                                                   20041228
PRAI JP 2002-189269
                         Α
                                20020628
     JP 2002-305146
                         Α
                                20021018
     JP 2002-377937
                         Α
                                20021226
     WO 2003-JP8192
                                20030627
OS
     MARPAT 140:77165
AΒ
     The title compds. I [wherein R1 = saturate cyclic amino, alkylamino, or
     dialkylamino; R2 = alkyl, halo, haloalkyl, hydroxyalkyl, alkoxy,
     alkoxyalkyl, alkoxycarbonyl, acyl, amino, alkylamino, dialkylamino, NO2,
     carbamoyl, alkylcarbamoyl, dialkylcarbamoyl, or CN; R3 = H, halo, or
     alkoxy; Het1 = pyridyl, Ph, pyrimidyl, pyrazinyl, or triazinyl; Het2 =
     pyridyl, pyrimidyl, pyrazinyl, pyridazinyl, or 1,2-dihydropyridazinyl;
     etc.] or salts thereof are prepared as BCR-ABL tyrosine kinase inhibitors,
     and are useful for the treatment of leukemia (no data). For example, the
     compound II was prepared in a multi-step synthesis. II showed inhibitory
     activities with IC50 of 0.0008 and 3.99 \mu M against cell proliferation
     of K562 and U937, resp., in cow. Formulations containing I as an active
     ingredient were also described.
IT
     641615-11-4P 641615-12-5P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
        (drug candidate; preparation of [(piperazinyl)methyl]benzamides for
        treatment of leukemia)
RN
     641615-11-4 CAPLUS
CN
     Benzamide, 3-bromo-4-[(dimethylamino)methyl]-N-[4-methyl-3-[[4-(3-
    pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)
```

RN

641615-12-5 CAPLUS
Benzamide, 3-bromo-4-[(diethylamino)methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME) CN



RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 29 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

2003:738968 CAPLUS AN

DN 139:358017

ΤI Kinases, Homology Models, and High Throughput Docking

ΑU Diller, David J.; Li, Rixin

CS Pharmacopeia, Inc., Princeton, NJ, 08543-5350, USA

SO Journal of Medicinal Chemistry (2003), 46(22), 4638-4647 CODEN: JMCMAR; ISSN: 0022-2623

PΒ American Chemical Society

DT Journal

LA English

AΒ With the many protein sequences coming from the genome sequencing projects, it is unlikely that the authors will ever have an atomic resolution structure of every relevant protein. With high throughput crystallog., however, the authors will soon have representative structures for the vast majority of protein families. Thus the drug discovery and design process will rely heavily on protein modeling to address issues such as designing combinatorial libraries for an entire class of targets and engineering genome-wide selectivity over a target class. In this study the authors assess the value of high throughput docking into homol. models. To do this the authors dock a database of random compds. seeded with known inhibitors into homol. models of six different kinases. In five of the six cases the known inhibitors were enriched by factors of 4-5 in the top 5% of the overall scored and ranked compds. Furthermore, in the same five cases the known inhibitors were enriched by factors of 2-3 in the top 5%of the scored and ranked known kinase inhibitors, thus showing that the homol. models can pick up some of the crucial selectivity information. ΙT

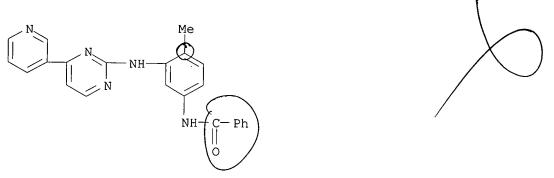
152459-94-4D, derivs.

RL: PAC (Pharmacological activity); PRP (Properties); BIOL (Biological study)

(protein kinases and homol. models and high throughput docking in relation to drug discovery and design)

RN 152459-94-4 CAPLUS

Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-CN (CA INDEX NAME)



RE.CNT 76 THERE ARE 76 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/528,913

L10 ANSWER 30 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2003:689661 CAPLUS

DN 139:374254

TI Synthesis of pyrimidinopyridine-triazene conjugates targeted to abl tyrosine kinase

AU Rachid, Zakaria; Katsoulas, Athanasia; Brahimi, Fouad; Jean-Claude, Bertrand Jacques

CS Department of Medicine, Division of Medical Oncology, Cancer Drug Research Laboratory, McGill University/Royal Victoria Hospital, Montreal, QC, 687, Can.

SO Bioorganic & Medicinal Chemistry Letter (2003), 13(19), 3297-3300 CODEN: BMCLE8; ISSN: 0960-894X

PB Elsevier Science B.V.

DT Journal

LA English

OS CASREACT 139:374254

AB The synthesis and abl tyrosine kinase inhibitory activities of alkyltriazenes conjugated to phenylaminopyrimidines are described. Significant abl inhibitory activities were observed only when a benzamido spacer was inserted between the 1,2,3-triazene chain and the 2-phenyaminopyridopyrimidine moiety.

IT 623901-00-8P 623901-01-9P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(synthesis of pyrimidinopyridine-triazene conjugates targeted to abl tyrosine kinase and cytotoxicity structure activity)

RN 623901-00-8 CAPLUS

CN Benzamide, 4-amino-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 623901-01-9 CAPLUS

CN Benzamide, 4-amino-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

$$\begin{array}{c|c} O \\ \hline C - NH \\ \hline \end{array}$$

IT 623901-02-0P 623901-03-1P 623901-04-2P 623901-05-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(synthesis of pyrimidinopyridine-triazene conjugates targeted to abl tyrosine kinase and cytotoxicity structure activity)

RN 623901-02-0 CAPLUS

CN Benzamide, 4-[3-(2-methoxyethyl)-1-triazenyl]-N-[3-[[4-(3-pyridinyl)-2-methoxyethyl]]

pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 623901-03-1 CAPLUS

CN Benzamide, 4-(3,3-dimethyl-1-triazenyl)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 623901-04-2 CAPLUS

CN Benzamide, 4-[3-(hydroxymethyl)-3-methyl-1-triazenyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} Me & NH & NH & NH \\ HO-CH_2-N-N=N & Me & Me \end{array}$$

RN 623901-05-3 CAPLUS

CN Benzamide, 4-[3-(2-chloroethyl)-3-methyl-1-triazenyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} Me & \\ \hline \\ C1CH_2-CH_2-N-N=N \end{array}$$

IT 623900-98-1P 623900-99-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis of pyrimidinopyridine-triazene conjugates targeted to abl tyrosine kinase and cytotoxicity structure activity)

RN 623900-98-1 CAPLUS

CN Benzamide, 4-nitro-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl](9CI) (CA INDEX NAME)

RN 623900-99-2 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4-nitro-(9CI) (CA INDEX NAME)

$$\bigcap_{O_2N}^{O} \bigcap_{NH}^{NH} \bigcap_{NH}^{N}$$

RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L10
     ANSWER 31 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN
      2003:678606 CAPLUS
 ΑN
 DN
      139:197709
 ΤI
      macrolide erythromycin conjugates of biologically active compounds,
     methods for their preparation and use, formulation, and pharmaceutical
      applications thereof
      Burnet, Michael; Guse, Jan-Hinrich; Gutke, Hans-Jurgen; Beck, Albert;
 ΙN
     Tsotsou, Georgia; Droste-Borel, Irina; Reichert, Jeannette; Luyten,
     Kattie; Busch, Maximilian; Wolff, Michael; Khobzaoui, Moussa; Margutti,
     Simona; Meindl, Thomas; Kim, Gene; Barker, Laurence
 PA
     Sympore G.m.b.H., Germany
      PCT Int. Appl., 183 pp.
 SO
     CODEN: PIXXD2
DT
      Patent
LA
     English
FAN.CNT 2
     PATENT NO.
                          KIND
                                 DATE
                                             APPLICATION NO.
                                                                     DATE
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                                 -----
                                             ______
                      A2
PΙ
     WO 2003070174
                                 20030828
                                             WO 2003-US4609
                                                                     20030214
     WO 2003070174
                          A3 20031113
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
              CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
              GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
              PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
              UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     CA 2476423
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     EP 1483277
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                           A1
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PRAI US 2002-357434P
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                                 20020215
     WO 2003-US4609
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                                 20030214
OS
     MARPAT 139:197709
AΒ
     Erythromycin macrolide conjugates T-(L-C)m, wherein T is a
     transportophore, L is a bond or a linker having a mol. weight up to 240
     dalton, C is a non-antibiotic therapeutic agent, and m is 1-8, in which
     the transportophore has an immune selectivity ratio of at least 2, the
     transportophore is covalently bonded to the non-antibiotic therapeutic
     agent via the bond or the linker, and the compound has an immune selectivity
     ratio of at least 2, useful for enhancing efficacy of a therapeutic agent.
     Thus, macrolide I (R = R1) was prepared in 76% yield via coupling of \tilde{I} (R = R1)
     H) with diclofenac as antitumor and antibacterial agent and was tested in
     vitro for its cytotoxicity and immunosuppressive activity using a mouse
     skin transplant model.
ΙT
     586412-38-6P
     RL: IMF (Industrial manufacture); PAC (Pharmacological activity); SPN
     (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study);
     PREP (Preparation); USES (Uses)
        (macrolide erythromycin conjugates of biol. active compds. methods for
        their preparation and use formulation and pharmaceutical applications
        thereof)
RN
     586412-38-6 CAPLUS
CN
     1-Oxa-6-azacyclopentadecan-15-one, 13-[(2,6-dideoxy-3-C-methyl-3-O-methyl-
```

 $\alpha-L-ribo-hexopyranosyl) oxy]-2-ethyl-3,4,10-trihydroxy-3,5,6,8,10,12,14-heptamethyl-11-[[3,4,6-trideoxy-3-(dimethylamino)-2-O-[[4-[4-[[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]amino]carbon yl]phenyl]-1-piperazinyl]acetyl]-<math display="inline">\beta$ -D-xylo-hexopyranosyl]oxy]-, (2R, 3S, 4R, 5R, 8R, 10R, 11R, 12S, 13S, 14R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

PAGE 2-A

IT 586412-43-3P

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (macrolide erythromycin conjugates of biol. active compds. methods for their preparation and use formulation and pharmaceutical applications thereof)

RN 586412-43-3 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-[4-[[[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]amino]carbonyl]phenyl]-, 9H-fluoren-9-ylmethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 32 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN
ΑN
     2003:678605 CAPLUS
DN
     139:197708
     macrolide erythromycin conjugates of biologically active compounds,
TI
     methods for their preparation and use, formulation, and pharmaceutical
     applications thereof
IN
     Burnet, Michael; Guse, Jan-Hinrich; Kim, Gene; Beck, Albert; Tsotsou,
     Georgia; Droste-Borel, Irina; Barker, Laurence; Wolff, Michael; Gutke,
     Hans-Jurgen
PΑ
     Sympore G.m.b.H., Germany
SO
     PCT Int. Appl., 164 pp.
     CODEN: PIXXD2
DT
     Patent
     English
LA
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                                                APPLICATION NO.
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PRAI US 2002-357589P
                             Ρ
                                   20020215
     WO 2003-US4596
                             W
                                   20030214
OS
     MARPAT 139:197708
     Erythromycin macrolide conjugates T-(L-C)m, wherein T is a
AΒ
     transportophore, L is a bond or a linker having a mol. weight up to 240
     dalton, C is a non-antibiotic therapeutic agent, and m is 1-8, in which
     the transportophore has an immune selectivity ratio of at least 2, the
     transportophore is covalently bonded to the non-antibiotic therapeutic
     agent via the bond or the linker, and the compound has an immune selectivity
     ratio of at least 2, useful for enhancing efficacy of a therapeutic agent.
     Thus, macrolide I (R = R1) was prepared in 76% yield via coupling of I (R = R1)
     H) with diclofenac as antitumor and antibacterial agent and was tested in
     vitro for its cytotoxicity and immunosuppressive activity using a mouse
     skin transplant model.
ΙT
     586412-38-6P
     RL: IMF (Industrial manufacture); PAC (Pharmacological activity); SPN
     (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study);
     PREP (Preparation); USES (Uses)
         (macrolide erythromycin conjugates of biol. active compds. methods for
        their preparation and use formulation and pharmaceutical applications
        thereof)
RN
     586412-38-6
                   CAPLUS
CN
     1-0xa-6-azacyclopentadecan-15-one, 13-[(2,6-dideoxy-3-C-methyl-3-0-methyl-
```

 α -L-ribo-hexopyranosyl)oxy]-2-ethyl-3,4,10-trihydroxy-

ALL CITATIONS AVAILABLE IN THE RE FORMAT

3,5,6,8,10,12,14-heptamethyl-11-[[3,4,6-trideoxy-3-(dimethylamino)-2-0-[[4-[4-[[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]amino]carbon yl]phenyl]-1-piperazinyl]acetyl]- β -D-xylo-hexopyranosyl]oxy]-, (2R,3S,4R,5R,8R,10R,11R,12S,13S,14R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

IT 586412-43-3P

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (macrolide erythromycin conjugates of biol. active compds. methods for their preparation and use formulation and pharmaceutical applications thereof)

RN 586412-43-3 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-[4-[[[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]amino]carbonyl]phenyl]-, 9H-fluoren-9-ylmethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

- L10ANSWER 33 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN
- ΑN 2003:633685 CAPLUS
- DN 139:180080
- TΙ Preparation of N-(pyridin-3-ylpyrimidin-2-ylaminophenyl)benzamide derivatives
- Loiseleur, Olivier; Kaufmann, Daniel; Abel, Stephan; Buerger, Hans ΙN Michael; Meisenbach, Mark; Schmitz, Beat; Sedelmeier, Gottfried
- Novartis A.-G., Switz.; Novartis Pharma G.m.b.H. PA
- SO PCT Int. Appl., 38 pp. CODEN: PIXXD2
- DTPatent
- English LA
- FAN.CNT 1

AΒ

FAIV.		PATENT NO.					D -	DATE		APPLICATION NO.						DATE			
ΡI	WO 2003066613					A1				WO 2003-EP1188						20030206			
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			HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG	, KP,	KR,	ΚZ,	LC,	LK,	LT,	LU,	
			LV,	MA,	MD,	MK,	MN,	MX,	NO,	ΝZ,	OM	, PH,	PL,	PT,	RO,	RU,	SC,	SE,	
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			DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	, IT,	LU,	MC,	NL,	PT,	SE,	SI,	
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	CN	1630648 2005528340 534315 101016262 2004CN01716				Δ	=												
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PRAI						A		2002											
								2003											
CN 2003-803556 WO 2003-EP1188						A3 20030206 W 20030206													
os	30	VV		2003	JZUO														
	11 - 11			-000	<i>-</i>														

The present invention relates to a process for the preparation of the title compds., amides I [R1, R2, R3, R4, R5 = lower alkyl, amino, lower alkoxycarbonyl, unsubstituted or substituted radical selected from benzylamino, benzoylamino, pyrrolidinyl, piperazinyl, 4-methylpiperazinyl, H, cyano, etc., with substituents selected from cyano, lower alkyl, CF3, halogen, etc.; R1R2 or R2R3 or R3R4 or R4R5 = substituted or unsubstituted alkylene radical with 4 carbons, substituents = cyano, hydroxy, 4-methylpiperazinyl-substituted lower alkyl, etc. while the other three radicals are independently H, cyano, hydroxy, CF3, etc.; R6, R7, or R8 =

halogen, NH2, NO2, NHCOCF3, NHCOMe, NHC(NH)NH2 while the other two radicals are H, lower alkyl, lower fluorinated alkyl, benzyl, Ph, Me]. For example, benzamide II was prepared by reacting 4-(3-pyridyl)-2pyridineamine with N-(3-bromo-4-methylphenyl)-4-(4-methylpiperazin-1-



ylmethyl)benzamide, which was prepared by condensing 3-bromo-4-methylaniline and 4-(4-methylpiperazin-1-ylmethyl)benzoic acid Me ester in toluene in the presence of AlMe3.

IT 581076-66-6P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(preparation of N-(pyridin-3-ylpyrimidin-2-ylaminophenyl)benzamide derivs.)

RN 581076-66-6 CAPLUS

CN Benzamide, 4-(dichloromethyl)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

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ΑN
     2003:591164
                 CAPLUS
DN
     139:149642
ΤI
     Preparation of benzoylaminophenylaminopyrimidinylpyridines as antitumor
     Boernsen, Klaus Olaf; End, Peter; Gross, Gerhard; Pfaar, Ulrike
ΙN
     Novartis Ag, Switz.; Novartis Pharma Gmbh
PΑ
     PCT Int. Appl., 50 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
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                                DATE
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PRAI GB 2002-1508
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     EP 2003-731700
                          A3
                                20030122
     WO 2003-EP613
                                20030122
OS
    MARPAT 139:149642
AB
     Title compds. I [R1 = , OH; R2 = H, alkyl, hydroxyalkyl; A = NR3R4, CR3R4,
     OR3R4; R3R4 = (un)substituted alkylene, oxaalkylene, azaalkylene; at least
     one N atom is substituted by O] were prepared for use as antitumor agents
     (no data). Thus, I [R1 = H, R2 = Me, A = 4-methyl-4-oxido-1-piperazinyl]
     was prepared by oxidation of I [R1 = H, R2 = Me, A = 4-methyl-1-piperazinyl].
ΙT
     152459-94-4
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (preparation of benzoylaminophenylaminopyrimidinylpyridines as antitumor
        agents)
RN
     152459-94-4 CAPLUS
CN
     Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-
     (CA INDEX NAME)
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IT 180258-56-4P 571187-02-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of benzoylaminophenylaminopyrimidinylpyridines as antitumor agents)

RN 180258-56-4 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(1-oxido-3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 571187-02-5 CAPLUS

CN Benzamide, 4-(chloromethyl)-N-[4-methyl-3-[[4-(1-oxido-3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 35 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN
AN
     2003:551338 CAPLUS
DN
     139:111702
TI
     Compositions and methods using ATP-dependent \gamma-secretase modulators
     for prevention and treatment of amyloid-\beta peptide-related disorders,
     and screening methods for modulators of \ensuremath{A\beta}
ΙN
     Netzer, William J.; Greengard, Paul; Xu, Huaxi
PA
     The Rockefeller University, USA
     PCT Int. Appl., 142 pp.
SO
     CODEN: PIXXD2
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FAN.CNT 1
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                                                                    20030106
PRAI US 2002-345009P
                          Ρ
                                20020104
     WO 2003-US249
                          W
                                20030106
OS
     MARPAT 139:111702
AΒ
     The invention provides methods and compns. for modulating levels of
     amyloid-\beta peptide (A\beta) exhibited by cells or tissues. The
     invention also provides pharmaceutical compns. and methods of screening
     for compds. that modulate Aeta levels. The invention also provides
     modulation of A\beta levels via selective modulation (e.g., inhibition)
     of ATP-dependent \gamma-secretase activity. The invention also provides
     methods of preventing, treating or ameliorating the symptoms of a
     disorder, including but not limited to an A\beta-related disorder, by
     administering a modulator of \gamma\mbox{-secretase,} including, but not limited
     to, a selective inhibitor of ATP-dependent \gamma-secretase activity or
     an agent that decreases the formation of active (or optimally active)
     \gamma-secretase. The invention also provides the use of inhibitors of
     ATP-dependent \gamma-secretase activity to prevent, treat or ameliorate
     the symptoms of Alzheimer's disease.
ΙT
     560070-08-8
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (ATP-dependent enzyme modulators for prevention and treatment of
        amyloid-\beta peptide-related disorders, and screening methods for
        modulators of AB)
RN
     560070-08-8 CAPLUS
     CN
     pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)
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ANSWER 36 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN
     2002:889028
AN
                 CAPLUS
DN
     137:379974
TI
     Pyridylpyrimidine derivatives as effective compounds against prion
     Stein-Gerlach, Matthias; Salassidis, Konstadinos; Bacher, Gerald; Mueller,
TN
     Stefan
PΑ
     Axxima Pharmaceuticals A.-G., Germany
SO
     PCT Int. Appl., 96 pp.
     CODEN: PIXXD2
DΤ
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                        KIND
                                DATE APPLICATION NO. DATE
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             KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB,
             GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA,
             GN, GQ, GW, ML, MR, NE, SN, TD, TG
     CA 2446939
                         С
                                20021121
                                            CA 2002-2446939
                                                                    20020516
     CA 2446939
                          A1
                                20021121
     AU 2002342878
                          A1
                                20021125
                                            AU 2002-342878
                                                                    20020516
     EP 1395261
                          A2
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                                                                    20020516
     EP 1395261
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     AT 331519
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     EP 1721609
                          A2
                                20061115
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                                                                    20020516
     EP 1721609
                          A3
                                20070131
             AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC,
             NL, PT, SE, TR
     US 2003176443
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                         A1
                                20060928
                                            US 2006-350410
                                                                    20060208
                        A
PRAI EP 2001-111858
                                20010516
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                                20010529
     EP 2001-117113
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     US 2001-305898P
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     EP 2002-769490
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                                20020516
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                          W
                                20020516
     US 2002-204041
                         В1
                                20020816
OS
     MARPAT 137:379974
     The present invention relates to pyridylpyrimidine derivs. of the general
AΒ
     formula (I) : wherein R represents hydrogen or Me and Z represents
     nitrogen containing functional groups, the use of the pyridylpyrimidine
     derivs. as pharmaceutically active agents, especially for the prophylaxis
```

treatment of prion infections and prion diseases, as well as compns. containing at least one pyridylpyrimidine derivative and/or pharmaceutically acceptable salt thereof. Furthermore, the present invention is directed to methods for preventing and/or treating prion infections and prion diseases using said pyridylpyrimidine derivs. Human cellular protein kinases, phosphatases and cellular signal transduction mols. are disclosed

and/or

as targets for detecting, preventing and/or treating prion infections and diseases, especially BSE, vCJD, or CJD, which can be inhibited by the inventive pyridylpyrimidine derivs.

ΙT 152459-76-2 152459-86-4 152459-88-6 152459-91-1 152459-92-2 152459-94-4 152459-96-6 152459-98-8 152459-99-9 404844-11-7 475587-06-5 475587-08-7 475587-09-8 475587-12-3 475587-13-4 475587-14-5 475587-15-6 475587-18-9 475587-19-0 475587-25-8 475587-26-9 475587-27-0 475587-29-2 475587-31-6 475587-32-7 475587-34-9 475587-38-3 475587-40-7 475587-41-8 475587-42-9 475587-43-0 475587-44-1 475587-46-3 475587-47-4 475587-48-5 475587-49-6 475587-50-9 475587-57-6 475587-58-7 475587-59-8 475587-60-1 475587-62-3 475587-63-4 475587-64-5 475587-72-5 475587-73-6 475587-74-7 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pyridylpyrimidine derivs. as effective compds. against prion diseases) 152459-76-2 CAPLUS RN Benzamide, 4-chloro-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-CN (9CI) (CA INDEX NAME)

RN 152459-86-4 CAPLUS

CN Benzamide, 2-methoxy-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 152459-88-6 CAPLUS

CN Benzamide, 4-cyano-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 152459-91-1 CAPLUS

CN Benzamide, 4-methyl-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 152459-92-2 CAPLUS

CN Benzamide, 4-chloro-N-[3-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 152459-94-4 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(CA INDEX NAME)

RN 152459-96-6 CAPLUS

CN Benzamide, 4-methyl-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 152459-98-8 CAPLUS

CN Benzamide, 4-chloro-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 152459-99-9 CAPLUS

CN Benzamide, 2-methoxy-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 404844-11-7 CAPLUS

CN Benzamide, 4-(chloromethyl)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 475587-06-5 CAPLUS

CN Benzamide, 4-(chloromethyl)-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-08-7 CAPLUS

CN Benzamide, 3,4,5-trimethoxy-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-09-8 CAPLUS

CN Benzamide, 4-methoxy-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 475587-12-3 CAPLUS

CN Benzamide, 3,5-dimethoxy-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-13-4 CAPLUS

CN Benzamide, 3,4,5-trimethoxy-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-14-5 CAPLUS

CN Benzamide, 4-cyano-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-15-6 CAPLUS

CN Benzamide, 4-methoxy-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-18-9 CAPLUS

CN Benzamide, 3,5-dimethoxy-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-19-0 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4-(trifluoromethoxy)- (9CI) (CA INDEX NAME)

RN 475587-25-8 CAPLUS

CN Benzamide, 3,4,5-trimethoxy-N-[4-methyl-3-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-26-9 CAPLUS

CN Benzamide, 4-cyano-N-[4-methyl-3-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-27-0 CAPLUS

CN Benzamide, 4-chloro-N-[4-methyl-3-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-29-2 CAPLUS

CN Benzamide, 4-cyano-N-[4-methyl-3-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-31-6 CAPLUS

CN Benzamide, 4-methoxy-N-[4-methyl-3-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-32-7 CAPLUS

CN Benzamide, 4-chloro-N-[4-methyl-3-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-34-9 CAPLUS

CN Benzamide, 3,5-dimethoxy-N-[3-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-38-3 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4-(trifluoromethoxy)- (9CI) (CA INDEX NAME)

RN 475587-40-7 CAPLUS

CN Benzamide, 4-methoxy-N-[3-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 475587-41-8 CAPLUS

CN Benzamide, 4-cyano-N-[3-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-42-9 CAPLUS

CN Benzamide, 3,4,5-trimethoxy-N-[3-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-43-0 CAPLUS

CN Benzamide, 3,5-dimethoxy-N-[4-methyl-3-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-44-1 CAPLUS

CN Benzamide, 3,4,5-trimethoxy-N-[4-methyl-3-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-46-3 CAPLUS

CN Benzamide, 4-methoxy-N-[4-methyl-3-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-47-4 CAPLUS

CN Benzamide, 3,5-dimethoxy-N-[4-methyl-3-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-48-5 CAPLUS

CN Benzamide, N-[3-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-49-6 CAPLUS

CN Benzamide, 4-chloro-N-[3-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 475587-50-9 CAPLUS

CN Benzamide, 4-methoxy-N-[3-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 475587-57-6 CAPLUS

CN Benzamide, 4-cyano-N-[3-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-58-7 CAPLUS

CN Benzamide, 3,5-dimethoxy-N-[3-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-59-8 CAPLUS

CN Benzamide, 4-bromo-N-[3-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 475587-60-1 CAPLUS

CN Benzamide, 4-methyl-N-[3-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 475587-62-3 CAPLUS

CN Benzamide, 3,5-dichloro-N-[3-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 475587-63-4 CAPLUS

CN Benzamide, N-[3-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-64-5 CAPLUS

CN Benzamide, 4-(chloromethyl)-N-[3-[[4-(2-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 475587-72-5 CAPLUS

CN Benzamide, 2-methoxy-N-[3-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 475587-73-6 CAPLUS

CN Benzamide, N-[3-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]-4-(trifluoromethoxy)- (9CI) (CA INDEX NAME)

RN 475587-74-7 CAPLUS

CN Benzamide, 4-methyl-N-[3-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

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L10
     ANSWER 37 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN
ΑN
     2002:220573 CAPLUS
DN
     136:247605
TΙ
     N-phenyl-2-pyrimidinamine derivatives as tyrosine kinase inhibitors
ΙN
     Buerger, Hans Michael; Caravatti, Giorgio; Zimmermann, Juerg; Manley, Paul
     William; Breitenstein, Werner; Cudd, Margaret Amelia
PA
     Novartis A.-G., Switz.; Novartis-Erfindungen Verwaltungsgesellschaft
     m.b.H.
SO
     PCT Int. Appl., 54 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                         KIND
                                DATE
                                           APPLICATION NO.
                                                                   DATE
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PΙ
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                                            WO 2001-EP10503
                                                                   20010911
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     JP 2004509111
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                                            JP 2002-526850
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     CN 1525967
                                            CN 2001-815539
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     US 7081532
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PRAI GB 2000-22438
                          Α
                                20000913
     CN 2001-815539
                          ΑЗ
                                20010911
     WO 2001-EP10503
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                                20010911
     US 2003-363841
                          А3
                                20030310
OS
     MARPAT 136:247605
     The N-phenyl-2-pyrimidinamines I [R = substituted Ph; R1 = (un) substituted
AB
     pyrazinyl, 1-methylpyrrolyl, aminophenyl, aminoalkylphenyl, indolyl,
     imidazolyl, pyridyl, pyridyl N-oxide; R2, R3 = H, alkyl] were prepared for
     use as tyrosine kinase inhibitors with IC50 of 3-300 nM. Thus, the
     benzamide II [R4 = 4-ethylpiperazino] was prepared from II [R4 = C1] and
     1-ethylpiperazine.
IT
     404844-10-6 404844-11-7
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (preparation of N-phenyl-2-pyrimidinamine derivs. as tyrosine kinase
        inhibitors)
RN
     404844-10-6 CAPLUS
CN
     Benzamide, 4-(chloromethyl)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-
     pyrimidinyl]amino]phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)
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● HCl

RN 404844-11-7 CAPLUS

CN Benzamide, 4-(chloromethyl)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

IT 404843-95-4P 404843-96-5P 404844-04-8P

404844-05-9P 404844-06-0P 404844-07-1P

404844-08-2P 404844-09-3P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-phenyl-2-pyrimidinamine derivs. as tyrosine kinase inhibitors)

RN 404843-95-4 CAPLUS

CN Benzamide, 4-[(diethylamino)methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 404843-96-5 CAPLUS

CN Benzamide, 4-[(dimethylamino)methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 404844-04-8 CAPLUS

CN Benzamide, 3-(dimethylamino)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 404844-05-9 CAPLUS

CN Benzamide, 4-(dimethylamino)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 404844-06-0 CAPLUS

CN Benzamide, 4-(acetylamino)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 404844-07-1 CAPLUS

CN Benzamide, 3-(acetylamino)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 404844-08-2 CAPLUS

CN Benzamide, 3-hydroxy-4-methyl-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 404844-09-3 CAPLUS

CN Benzamide, 4-(1,1-dimethylethyl)-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L10
     ANSWER 38 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN
AN
     2000:133467 CAPLUS
DN
     132:175828
TΙ
     Method using phthalazine derivatives for treating ocular neovascular
     diseases
IN
     Brazzell, Romulus Kimbro; Wood, Jeanette Marjorie; Campochiaro, Peter
     Anthony; Kane, Frances Elizabeth
PA
     Novartis A.-G., Switz.; Novartis-Erfindungen Verwaltungsgesellschaft
SO
     PCT Int. Appl., 30 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
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                                              APPLICATION NO.
                                                                      DATE
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PΙ
     WO 2000009098
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                                  20000224
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             TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW
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             CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     AU 9957330
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                                                                      19990811
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                                 20020723
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PRAI US 1998-133855
                           Α
                                 19980813
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                           W
                                 19990811
     MARPAT 132:175828
OS
AB
     Phthalazines are used in the preparation of medicaments for the treatment of
     ocular neovascularization.
ΙT
     152459-94-4, CGP 53716
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); BIOL (Biological study)
        (phthalazine derivs. for treating ocular neovascular diseases)
RN
     152459-94-4 CAPLUS
CN
     Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-
     (CA INDEX NAME)
```

- L10 ANSWER 39 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN
- AN 1999:316816 CAPLUS
- DN 131:125171
- TI Prevention of cardiac allograft arteriosclerosis by protein tyrosine kinase inhibitor selective for platelet-derived growth factor receptor
- AU Sihvola, Roope; Koskinen, Petri; Myllarniemi, Marjukka; Loubtchenkov, Michael; Hayry, Pekka; Buchdunger, Elisabeth; Lemstrom, Karl
- CS Cardiopulmonary Research Group of the Transplantation Laboratory, University of Helsinki and Helsinki University Central Hospital, Helsinki, FIN-00014, Finland
- SO Circulation (1999), 99(17), 2295-2301 CODEN: CIRCAZ; ISSN: 0009-7322
- PB Lippincott Williams & Wilkins
- DT Journal
- LA English
- AB Background-Increased immunoreactivity of platelet-derived growth factor (PDGF)-AA, -R α , and -R β in intimal cells correlates with the development of cardiac allograft arteriosclerosis, a condition for which there is little or no current therapy. Therefore, we hypothesized that PDGF may have a rate-limiting role in the development of this disease. Methods and Results-The hypothesis was tested in a rat model of heterotopic cardiac and aortic allografts using dark agouti (AG-B4, RT1a) donors and Wistar-Furth (AG-B2, RTlu) recipients. The recipients received CGP 53716, a selective PDGF-R protein tyrosine kinase inhibitor, 50 mg kg-1 • d-1, or vehicle for 60 days. Cardiac allograft recipients also received background cyclosporin A immunosuppression. Our results demonstrate that CGP 53716 significantly reduced the incidence and intensity of arteriosclerotic lesions in rat cardiac and aortic allograft recipients. When rat coronary smooth muscle cells were stimulated in vitro with PDGF-AA or -BB in the presence of interleukin-1 $oldsymbol{eta}$ or tumor necrosis factor- α , CGP 53716 significantly inhibited only AA-ligand-induced but not BB-ligand-induced replication. Concomitantly, in quant. reverse transcriptase-polymerase chain reaction, interleukin- 1β or tumor necrosis factor- α stimulation specifically upregulated the expression of PDGF-R α mRNA but not of other ligand or receptor genes in cultured smooth muscle cells. Conclusions-We conclude that a PDGF-AA/Rlpha-dependent cycle is induced in the generation of allograft arteriosclerosis that may be inhibited by blocking of signaling downstream of PDGF-R.
- IT 152459-94-4, CGP 53716

RN

- RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
- (prevention of cardiac allograft arteriosclerosis by protein tyrosine kinase inhibitor selective for platelet-derived growth factor receptor) 152459-94-4 CAPLUS
- CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)



RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 40 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1999:185580 CAPLUS

DN 131:27908

TI Inhibition of obliterative bronchiolitis by platelet-derived growth factor receptor protein-tyrosine kinase inhibitor

AU Kallio, E.; Koskinen, P.; Buchdunger, E.; Lemstrom, K.

CS Transplantation Laboratory, University of Helsinki, Helsinki, FIN-00014, Finland

SO Transplantation Proceedings (1999), 31(1/2), 187 CODEN: TRPPA8; ISSN: 0041-1345

PB Elsevier Science Inc.

DT Journal

LA English

The authors investigated the role of platelet-derived growth factor (PDGF) in the development of obliterative bronchiolitis and the effect of a protein-tyrosine kinase (PTK) inhibitor selective for PDGF receptors (CGP53716) on obliterative bronchiolitis in rats with tracheal transplantations. Significant upregulation of allograft PDGF-AA and α receptor expression was observed at 3 and 10 days after transplantation compared with syngeneic grafts. This study suggests a regulatory role for PDGF especially for PDGF-AA and α receptor in the development of obliterative bronchiolitis. This study also demonstrates that inhibition of PDGF receptors with protein-tyrosine kinase inhibitor significantly reduces myofibroproliferation and airway occlusion suggesting a novel therapeutic strategy for the prevention of obliterative bronchiolitis in lung transplantation.

IT 152459-94-4, CGP53716

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(inhibition of obliterative bronchiolitis by platelet-derived growth factor receptor protein-tyrosine kinase inhibitor in relation to role of platelet-derived growth factor and treatment in lung transplantation)

RN 152459-94-4 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(CA INDEX NAME)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 41 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1999:185568 CAPLUS

DN 131:13660

TI Prevention of cardiac allograft arteriosclerosis by protein-tyrosine kinase inhibitor selective for platelet-derived growth factor receptor

AU Koskinen, P.; Sihvola, R.; Myllarniemi, M.; Hayry, P.; Buchdunger, E.; Lemstrom, K.

CS Cardiopulmonary Research Group of the Transplantation Laboratory, University of Helsinki and Helsinki University Central Hospital, Helsinki, FIN-00014, Finland

SO Transplantation Proceedings (1999), 31(1/2), 102 CODEN: TRPPA8; ISSN: 0041-1345

PB Elsevier Science Inc.

DT Journal

LA English

AB Increased immunoreactivity of platelet-derived growth factor (PDGF) -AA, -R α , and -R β in intimal cells correlates with the development of cardiac allograft arteriosclerosis. The results of this study conclude that PDGF-AA-R α dependent cycle is induced in the generation of allograft arteriosclerosis, which may be inhibited by blocking of signaling downstream of PDGF-R.

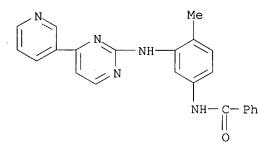
IT 152459-94-4, Cgp 53716

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(prevention of cardiac allograft arteriosclerosis by protein-tyrosine kinase inhibitor selective for platelet-derived growth factor receptor)

RN 152459-94-4 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(CA INDEX NAME)



RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT



L10 ANSWER 42 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1997:728227 CAPLUS

DN 128:43608

TI Inhibition of platelet-derived growth factor receptor tyrosine kinase inhibits vascular smooth muscle cell migration and proliferation

AU Myllarniemi, Marukka; Calderon, Lazaro; Lemstrom, Karl; Buchdunger, Elisabeth; Hayry, Pekka

CS Transplantation Laboratory, University of Helsinki, Helsinki, Finland

SO FASEB Journal (1997), 11(13), 1119-1126

CODEN: FAJOEC; ISSN: 0892-6638

PB Federation of American Societies for Experimental Biology

DT Journal

LA English

Platelet-derived growth factors (PDGFs) and their receptors (PDGFRs) have AΒ been linked to vascular smooth muscle cell (SMC) migration and proliferation leading to atherosclerosis, restenosis, and chronic allograft rejection. This study describes the effect of CGP 53716, a specific PDGFR tyrosine kinase inhibitor on SMC proliferation and migration in vitro and in neointimal formation in vivo. CGP 53716 inhibited dose dependently tyrosine phosphorylation of both the known PDGFRs: the PDGFR- α and PDGFR- β . In primary rat SMC cultures, a dose-dependent inhibition of PDGF-AA and PDGF-BB induced migration, and tritiated thymidine incorporation of SMC was seen at nontoxic concns. After rat carotid artery ballooning injury in vivo, the migration of $\alpha\text{-actin-pos.}$ cells on the luminal side of internal elastic lamina was decreased with 50 $mg \cdot kg - 1 \cdot day - 1$ of CGP 53716 from 38 \pm 10 (control group) to 4 \pm 2 (P<0.0001, Mann-Whitney U test, N=18). CGP 53716 did not inhibit the number of replicating bromodeoxyuridine (BrdU)-incorporating cells in the intima, media, or adventitia during BrdU labeling at 0-96 postoperative h, though it inhibited significantly (P<0.01) the replication of medial and intimal cells from 93 h onward. Intima/media ratio was inhibited by 40% after 14 days in the CGP 53716-treated group (P=0.028) after rat aortic denudation. The results indicate that inhibition of the PDGFR tyrosine kinase inhibits SMC migration and proliferation in vitro, SMC migration, and, to a lesser extent, proliferation after ballooning injury in vivo, confirming a causal role for activation of the PDGFR and the formation of neointimal lesions. ΙT

152459-94-4, CGP 53716
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(PDGFR tyrosine kinase inhibitor CGF 53716 antiatherosclerotic activity)

RN 152459-94-4 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(CA INDEX NAME)

X

- L10 ANSWER 43 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN
- AN 1997:674685 CAPLUS
- DN 127:355149
- TI Inhibition of cell growth: effects of the tyrosine kinase inhibitor CGP 53716
- AU Major, Terry C.; Keiser, Joan A.
- CS Parke-Davis Pharmaceutical Research Division, Department of Vascular and Cardiac Diseases, Warner Lambert Company, Ann Arbor, MI, USA
- SO Journal of Pharmacology and Experimental Therapeutics (1997), 283(1), 402-410
 - CODEN: JPETAB; ISSN: 0022-3565
- PB Williams & Wilkins
- DT Journal
- LA English
- AB The growth factors, platelet-derived growth factor (PDGF) and basic fibroblast growth factor (bFGF), play major roles in enhanced smooth muscle cells growth in rodent blood vessels after vascular injury. Tyrosine kinase inhibition has been shown to be effective in blocking tyrosine phosphorylation at the PDGF and bFGF receptors in cultured fibroblast and vascular smooth muscle cells which in turn inhibits their proliferation. Our study evaluated the PDGF selective tyrosine kinase inhibitor, CGP 53716, on serum, PDGF-BB, bFGF or epidermal growth factor-induced growth responses in cultured rat aortic smooth muscle cells (RASMC) and Balb/3T3 fibroblasts (3T3). CGP 53716 inhibited serum-induced cell growth in RASMC, but not in 3T3 cells. CGP 53716 completely blocked PDGF-BB tyrosine receptor autophosphorylation in RASMC and 3T3 cells, PDGF-BB-induced phosphorylation of mitogen-activated protein kinase at 1 μM in RASMC and inhibited PDGF-BB-induced c-Fos protein expression at 1 μM in RASMC; consistent with inhibition of PDGF-BB-induced DNA synthesis. To examine the selectivity of CGP 53716, PDGF-BB, bFGF or EGF-induced DNA synthesis was measured using thymidine incorporation. 53716 inhibited PDGF-BB-, bFGF- and EGF-induced DNA synthesis in a concentration-dependent manner in each cell line. CGP 53716 showed a 2- to 4-fold selectivity for PDGF-BB-stimulated DNA synthesis over bFGF or EGF in RASMC or 3T3 cells. To rule out that bFGF induced the release of endogenous PDGF, an antibody to PDGF-AB, which binds to all three isoforms of PDGF, was coincubated with bFGF and did not suppress the DNA synthesis induced by bFGF. Based on these results, CGP 53716 is not selective for the PDGF receptor as previously reported. However, EGF-stimulated receptor autophosphorylation of mitogen-activated protein kinase phosphorylation and c-Fos protein expression were not inhibited by CGP 53716 at 1 or 10 μM in RASMC. The findings suggest that CGP 53716 may inhibit multiple growth factor pathways as indicated by inhibition of DNA synthesis. However, these effects must be downstream from the signaling for c-Fos protein expression or use an alternate signaling route. These results further suggest that CGP 53716 may have a therapeutic potential for the treatment of vascular proliferative diseases which are stimulated by not only PDGF but other growth factors such as bFGF and EGF. IT
 - T 152459-94-4, CGP 53716
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (tyrosine kinase inhibitor CGP 53716 inhibition of vascular smooth muscle cell growth)
- RN 152459-94-4 CAPLUS
- CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(CA INDEX NAME)

RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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10/528,913
    ANSWER 44 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN
ΑN
     1997:617993 CAPLUS
DN
     127:272793
TΙ
     Antiproliferative combinations, containing raf-targeted oligonucleotides
     and chemotherapeutic compounds
IN
     Muller, Marcel; Geiger, Thomas; Altmann, Karl-Heinz; Fabbro, Doriano;
     Monia, Brett
PΑ
     Novartis AG, Switz.
SO
     PCT Int. Appl., 118 pp.
     CODEN: PIXXD2
DΤ
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                         KIND
                                DATE
                                           APPLICATION NO.
                                                                   DATE
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                                           ______
PΙ
     WO 9732604
                         A1
                                19970912
                                           WO 1997-EP875
                                                                  19970224
         W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP,
             KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG,
             SI, SK, TR, TT, UA, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,
             IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML,
             MR, NE, SN, TD, TG
     AU 9720925
                         Α
                                19970922
                                            AU 1997-20925
                                                                  19970224
     ZA 9701936
                          Α
                                19970908
                                            ZA 1997-1936
                                                                  19970306
PRAI US 1996-612787
                         Α
                                19960307
     WO 1997-EP875
                         W
                                19970224
AΒ
     The invention relates to combinations of raf-targeted (especially
     c-raf-targeted) deoxyribo- and ribo-oligonucleotides and derivs. thereof
     with other chemotherapeutic compds., as well as to pharmaceutical prepns.
     and/or therapies, in relation to disease states which respond to such
     products or combinations comprising antisense oligonucleotides or
     oligonucleotide derivs. targeted to nucleic acids encoding raf and other
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oligonucleotides or oligonucleotide derivs., especially to modulation of the activity of a regulatory protein. In particular, the invention relates to (preferably standard) chemotherapeutics, either in fixed combination or for chronol. staggered or simultaneous administration, and the combined use of both classes of compds., either in fixed combination or for chronol. staggered or simultaneous administration, for the treatment of proliferative diseases, especially tumor diseases, that can be treated by inhibition of raf activity, i.e., where the antisense oligonucleotides or oligonucleotide derivs. are targeted to nucleic acids encoding the regulatory protein raf or active mutated derivs. thereof.

ΙT 152459-94-4

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(raf-targeted oligonucleotide-chemotherapeutic compound antiproliferative combinations)

RN 152459-94-4 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(CA INDEX NAME)

- L10 ANSWER 45 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN
- AN 1997:123312 CAPLUS
- DN 126:220297
- TI Potent and selective inhibitors of the ABL-kinase: phenylaminopyrimidine (PAP) derivatives
- AU Zimmermann, Jurg; Buchdunger, Elisabeth; Mett, Helmut; Meyer, Thomas; Lydon, Nicholas B.
- CS Ciba Pharmaceuticals Division, Oncology Research Department, Ciba-Geigy Limited, Basel, CH-4002, Switz.
- SO Bioorganic & Medicinal Chemistry Letters (1997), 7(2), 187-192 CODEN: BMCLE8; ISSN: 0960-894X
- PB Elsevier
- DT Journal
- LA English
- AB Due to its relatively clear etiol., chronic myelogenous leukemia (CML) represents an ideal disease target for a therapy using a selective inhibitor of the Bcr-Abl tyrosine protein kinase. Extensive optimization of the class of phenylamino-pyrimidines yielded highly potent and selective Bcr-Abl kinase inhibitors.
- IT 152459-77-3P 152459-82-0P 152459-86-4P 152459-87-5P 152459-88-6P 152459-91-1P 152459-94-4P 152459-96-6P 152459-98-8P 152459-99-9P
 - RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
- (preparation of phenylaminopyrimidine derivs. as inhibitors of ABL-kinase)
- RN 152459-77-3 CAPLUS
- CN Benzamide, N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

- RN 152459-82-0 CAPLUS
- CN Benzoic acid, 2-[[[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]amino]ca rbonyl]- (9CI) (CA INDEX NAME)

- RN 152459-86-4 CAPLUS
- CN Benzamide, 2-methoxy-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 152459-87-5 CAPLUS

CN Benzamide, 4-fluoro-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 152459-88-6 CAPLUS

CN Benzamide, 4-cyano-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 152459-91-1 CAPLUS

CN Benzamide, 4-methyl-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 152459-94-4 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(CA INDEX NAME)

RN 152459-96-6 CAPLUS

CN Benzamide, 4-methyl-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 152459-98-8 CAPLUS

CN Benzamide, 4-chloro-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 152459-99-9 CAPLUS

CN Benzamide, 2-methoxy-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 46 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1996:495435 CAPLUS

DN 125:184908

TI Phenylamino-pyrimidine (PAP) derivatives: a new class of potent and selective inhibitors of protein kinase C (PKC)

AU Zimmermann, Juerg; Caravatti, Giorgio; Mett, Helmut; Meyer, Thomas; Mueller, Marcel; Lydon, Nicholas B.; Fabbro, Doriano

CS CIBA Pharmaceuticals Div., Oncology Virology Res. Dep., Ciba-Geigy Limited, Basel, CH-4002, Switz.

SO Archiv der Pharmazie (Weinheim, Germany) (1996), 329(7), 371-376 CODEN: ARPMAS; ISSN: 0365-6233

PB VCH

DT Journal

LA English

OS CASREACT 125:184908

AB Phenylamino-pyrimidines represent a novel class of inhibitors of protein kinase C with a high degree of selectivity vs. other serine/threonine and tyrosine kinases. Steady state kinetic anal. of N-(3-[1-imidazolyl]-phenyl)-4-(3-pyridyl)-2-pyrimidinamine , which showed potent inhibitory activity, revealed competitive kinetics relative to ATP. The adjacent H-bond acceptor of the pyrimidine moiety next to an H-bond donor of the phenylamine was found to be crucial for inhibitory activity. N-(3-Nitro-phenyl)-4-(3-pyridyl)-2-pyrimidinamine preferentially inhibited PKC- α (IC50 = 0.79 μ M) and not the other subtypes tested. The inhibition consts. of PKC- α and the antiproliferative effect on T24 human bladder carcinoma cells showed a qual. correlation, although with some exceptions.

IT 152459-76-2P 152459-86-4P 152459-88-6P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of phenylamino-pyrimidine derivs. as a new class of potent and selective inhibitors of protein kinase C)

RN 152459-76-2 CAPLUS

CN Benzamide, 4-chloro-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 152459-86-4 CAPLUS

CN Benzamide, 2-methoxy-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 152459-88-6 CAPLUS

CN Benzamide, 4-cyano-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

L10 ANSWER 47 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1996:380210 CAPLUS

DN 125:114681

TI Pyrimidine derivatives and processes for the preparation thereof

IN Zimmermann, Juerg

PA Ciba-Geigy Corporation, USA

SO U.S., 18 pp., Cont.-in-part of U.S. Ser. No. 42,322, abandoned.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 3

211211	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5521184	A	19960528	US 1994-234889	19940428
	CA 2148477	A1	19950413	CA 1994-2148477	19940921
PRAI	CH 1992-1083	A	19920403		
	US 1993-42322	В2	19930402		
	CH 1993-2966	A	19931001		

OS MARPAT 125:114681

There are described N-phenyl-2-pyrimidine-amine derivs. (I) wherein R1 is 4-pyrazinyl, 1-methyl-1H-pyrrolyl, amino- or amino-lower alkyl-substituted Ph wherein the amino group in each case is free, alkylated or acylated, 1H-indolyl or 1H-imidazolyl bonded at a five-membered ring carbon atom, or unsubstituted or lower alkyl-substituted pyridyl bonded at a ring carbon atom and unsubstituted or substituted at the nitrogen atom by oxygen; R2 and R3 are hydrogen or lower alkyl; one or two of R4, R5, R6, R7 are each nitro, fluoro-substituted lower alkoxy or -N(R9)C(:X)(Y)nR10. These compds. can be used, for example, in the therapy of tumoral diseases. Three example formulations are given.

IT 179115-22-1

RL: RCT (Reactant); RACT (Reactant or reagent)

(for preparation of phenylaminopyrimidine derivs. as antitumor agents)

RN 179115-22-1 CAPLUS

CN Benzamide, N-[3-methyl-5-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

IT 152459-76-2P 152459-77-3P 152459-81-9P

152459-82-0P 152459-86-4P 152459-87-5P

152459-88-6P 152459-91-1P 152459-92-2P

152459-94-4P 152459-96-6P 152459-98-8P

152459-99-9P 152460-05-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of phenylaminopyrimidine derivs. as antitumor agents)

RN 152459-76-2 CAPLUS

CN Benzamide, 4-chloro-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)



RN 152459-77-3 CAPLUS

CN Benzamide, N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 152459-81-9 CAPLUS

CN Benzamide, 2,3,4,5,6-pentafluoro-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 152459-82-0 CAPLUS

CN Benzoic acid, 2-[[[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]amino]ca rbonyl]- (9CI) (CA INDEX NAME)

RN 152459-86-4 CAPLUS

CN Benzamide, 2-methoxy-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 152459-87-5 CAPLUS

CN Benzamide, 4-fluoro-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 152459-88-6 CAPLUS

CN Benzamide, 4-cyano-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 152459-91-1 CAPLUS

CN Benzamide, 4-methyl-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 152459-92-2 CAPLUS

CN Benzamide, 4-chloro-N-[3-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 152459-94-4 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl](CA INDEX NAME)

RN 152459-96-6 CAPLUS

CN Benzamide, 4-methyl-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 152459-98-8 CAPLUS

CN Benzamide, 4-chloro-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 152459-99-9 CAPLUS

CN Benzamide, 2-methoxy-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 152460-05-4 CAPLUS

CN Benzamide, N-[3-methyl-5-[[4-(1-oxido-3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

L10 ANSWER 48 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1996:368753 CAPLUS

DN 125:167896

TI (Phenylamino)pyrimidine (PAP) derivatives: a new class of potent and highly selective PDGF-receptor autophosphorylation inhibitors

AU Zimmermann, Juerg; Buchdunger, Elisabeth; Mett, Helmut; Meyer, Thomas; Lydon, Nicholas B.; Traxler, Peter

CS Oncol. Res. Dep., Ciba Pharm. Div., Basel, CH-4002, Switz.

SO Bioorganic & Medicinal Chemistry Letters (1996), 6(11), 1221-1226 CODEN: BMCLE8; ISSN: 0960-894X

PB Elsevier

DT Journal

LA English

AB (Phenylamino)pyrimidines represent a novel class of inhibitors of the PDGF-receptor autophosphorylation with a high degree of selectivity vs. other tyrosine and serine/threonine kinases. Optimum activity of ca 10 nM (IC50) was observed when the phenylamino-group which is attached to the pyrimidine carries a benzamide-moiety with a lipophilic substituent in 4-position. The target compds. were derivs. of 4-methyl-N3-[4-(3-pyridinyl)-2-pyrimidinyl]-1,3-benzenediamine I (R2 = H, Me; R3 = H, benzoyl, Me, etc.; R4 = H, benzoyl, etc.). A 2-thienyl analog of I was also prepared and tested.

IT 152459-77-3P 152459-94-4P 152459-96-6P 152459-98-8P 152459-99-9P 180258-56-4P

180258-58-6P 180258-59-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation of [(pyridinyl)pyrimidinyl]benzenediamines as tyrosine kinase or serine/threonine kinase inhibitors)

RN 152459-77-3 CAPLUS

CN Benzamide, N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 152459-94-4 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (CA INDEX NAME)

RN 152459-96-6 CAPLUS

CN Benzamide, 4-methyl-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

- RN 152459-98-8 CAPLUS
- CN Benzamide, 4-chloro-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

- RN 152459-99-9 CAPLUS
- CN Benzamide, 2-methoxy-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

- RN 180258-56-4 CAPLUS
- CN Benzamide, N-[4-methyl-3-[[4-(1-oxido-3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

- RN 180258-58-6 CAPLUS
- CN Benzamide, N-[4-chloro-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 180258-59-7 CAPLUS

CN Benzamide, N-[4-methoxy-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

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ANSWER 49 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN
L10
ΑN
     1995:909361 CAPLUS
DN
     123:313996
ΤI
     Preparation of N-phenyl-2-pyrimidineamine antitumor agents
ΙN
     Zimmermann, Juerg
PΑ
     Ciba-Geigy A.-G., Switz.
SO
     PCT Int. Appl., 69 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                         KIND
                                 DATE
                                             APPLICATION NO.
                                                                    DATE
                                 -----
PΙ
     WO 9509847
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                                 19950413
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             AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, JP, KG, KP,
             KR, KZ, LK, LR, LT, LV, MD, MG, MN, NO, NZ, PL, RO, RU, SI, SK,
             TJ, TT, UA, US, UZ, VN
         RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU,
             MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN,
             TD, TG
     CA 2148931
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                                 19950413
                                             CA 1993-2148931
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     AU 9476976
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                                 19950501
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     JP 08503971
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                                19960430
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PRAI CH 1993-2967
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                                19940718
     WO 1994-EP3150
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                                19940921
OS
     MARPAT 123:313996
     N-phenyl-2-pyrimidineamine derivs. [I; R1 = naphthyl, fluorenyl,
AΒ
     anthracenyl, (un) substituted cyclic residue, etc.; R2 = NO2, F-substituted
     lower alkoxy, etc.] [e.g., N-[3-(1,1,2,2-tetrafluoroethoxy)phenyl]-4-
     (3,4,5-trimethoxyphenyl)-2-pyrimidineamine; m.p. 132°], useful for
     the treatment of tumor diseases (no data), are prepared and I-containing
     formulations presented.
ΙT
     170141-43-2P
     RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological
     study); PREP (Preparation); USES (Uses)
        (preparation of N-phenyl-2-pyrimidineamine antitumor agents)
RN
     170141-43-2 CAPLUS
CN
     Benzamide, N-[3-[[4-[2-[(2-aminoethyl)amino]-4-pyridinyl]-2-
     pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)
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L10 ANSWER 50 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1995:479796 CAPLUS

DN 122:230302

TI Selective inhibition of the platelet-derived growth factor signal transduction pathway by a protein-tyrosine kinase inhibitor of the 2-phenylaminopyrimidine class

AU Buchdunger, Elisabeth; Zimmermann, Juerg; Mett, Helmut; Meyer, Thomas; Mueller, Marcel; Regenass, Urs; Lydon, Nicholas B.

CS Oncology Research Department, CIBA-Geigy Limited, Basel, CH-4002, Switz.

SO Proceedings of the National Academy of Sciences of the United States of America (1995), 92(7), 2558-62 CODEN: PNASA6; ISSN: 0027-8424

PB National Academy of Sciences

DT Journal

LA English

AΒ The platelet-derived growth factor (PDGF) receptor is a member of the transmembrane growth factor receptor protein family with intrinsic protein-tyrosine kinase activity. The authors described a potent protein-tyrosine kinase inhibitor (CGP 53716) that shows selectivity for the PDGF receptor in vitro and in the cell. The compound shows selectivity for inhibition of PDGF-mediated events such as PDGF receptor autophosphorylation, cellular tyrosine phosphorylation, and c-fos mRNA induction in response to PDGF stimulation of intact cells. In contrast, ligand-induced autophosphorylation of the epidermal growth factor (EGF) receptor, insulin receptor, and the insulin-like growth factor I receptor, as well as c-fos mRNA expression induced by EGF, fibroblast growth factor, and phorbol ester, was insensitive to inhibition by CGP 53716. In antiproliferative assays, the compound was ≈ 30 -fold more potent in inhibiting PDGF-mediated growth of v-sis-transformed BALB/c 3T3 cells relative to inhibition of EGF-dependent BALB/MK cells, interleukin-3-dependent FDC-P1 cells, and the T24 bladder carcinoma line. When tested in vivo using highly tumorigenic v-sis- and human c-sis-transformed BALB/c 3T3 cells, CGP 53716 showed antitumor activity at well-tolerated doses. In contrast, CGP 53716 did not show antitumor activity against xenografts of the A431 tumor, which overexpresses the EGF receptor. These findings suggest that CGP 53716 may have therapeutic potential for the treatment of diseases involving abnormal cellular proliferation induced by PDGF receptor activation.

IT 152459-94-4

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(phenylaminopyrimidine derivative as inhibitor of platelet-derived growth factor receptor tyrosine kinase)

RN 152459-94-4 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(CA INDEX NAME)

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L10 ANSWER 51 OF 51 CAPLUS COPYRIGHT 2007 ACS on STN
ΑN
     1994:107056 CAPLUS
DN
     120:107056
     Preparation of 2-anilinopyrimidines as antiatherosclerotics and neoplasm
TI
     inhibitors
     Zimmermann, Juerg
IN
     Ciba-Geigy A.-G., Switz.
PA
SO
     Eur. Pat. Appl., 23 pp.
     CODEN: EPXXDW
DT
     Patent
LA
     German
FAN.CNT 3
     PATENT NO.
                       KIND
                               DATE
                                           APPLICATION NO.
                                                                 DATE
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                               _____
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PΙ
     EP 564409
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                                                                 19930325
     EP 564409
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B1
A1
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                               20000630
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A
     CZ 283944
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                                           AU 1993-35694
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A
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    AU 666709
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    CN 1077713
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                                           CN 1993-103566
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    CN 1043531
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                               19931129
                                           HU 1993-982
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    JP 06087834
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                                                                 19930405
    JP 2706682
                        B2
                               19980128
     GR 3032927
                        Т3
                               20000731
                                           GR 2000-400623
                                                                 20000310
PRAI CH 1992-1083
                         Α
                               19920403
OS
    MARPAT 120:107056
AB
    Title compds. [I; R1 = pyridyl, 4-pyrazinyl, (acyl)aminophenyl, etc.; R2,
     R3 = H, alkyl; 1 or 2 of R4-R8 = NO2, fluoroalkoxy, NR9C(:X)YnR10 and the
     others = H, alkyl, alkanoyl, CF3, etc.; R9 = H, alkyl; R10 = (cyclo)aliphatic
     group, heterocyclyl, aryl, etc.; X = 0, S, NH, etc.; Y = 0 or NH; n = 0 or
     1] were prepared Thus, 3-(O2N)C6H4NHC(:NH)NH2 [preparation from 3-(O2N)C6H4NH2
     given] was cyclocondensed with R1COCH:CHNMe2 (R1 = 3-pyridyl) (preparation from
     3-acetylpyridine given) to give I (R1 = 3-pyridyl, R2 = R3 = R5-R8 = H, R4
    = NO2). I had IC50 of .apprx.0.5 to 5 \mu M against protein kinase C in
    vitro.
ΙT
    152459-76-2P 152459-77-3P 152459-81-9P
     152459-82-0P 152459-86-4P 152459-87-5P
     152459-88-6P 152459-91-1P 152459-92-2P
     152459-94-4P 152459-96-6P 152459-98-8P
     152459-99-9P 152460-05-4P
    RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation of, as antiatherosclerotic and neoplasm inhibitor)
RN
    152459-76-2 CAPLUS
CN
     Benzamide, 4-chloro-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-
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(9CI) (CA INDEX NAME)

RN 152459-77-3 CAPLUS

CN Benzamide, N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 152459-81-9 CAPLUS

CN Benzamide, 2,3,4,5,6-pentafluoro-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 152459-82-0 CAPLUS

CN Benzoic acid, 2-[[[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]amino]carbonyl]- (9CI) (CA INDEX NAME)

RN 152459-86-4 CAPLUS

CN Benzamide, 2-methoxy-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 152459-87-5 CAPLUS

CN Benzamide, 4-fluoro-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 152459-88-6 CAPLUS

CN Benzamide, 4-cyano-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 152459-91-1 CAPLUS

CN Benzamide, 4-methyl-N-[3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(9CI) (CA INDEX NAME)

RN 152459-92-2 CAPLUS

CN Benzamide, 4-chloro-N-[3-[[4-(4-pyridinyl)-2-pyrimidinyl]amino]phenyl](9CI) (CA INDEX NAME)

RN 152459-94-4 CAPLUS

CN Benzamide, N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-(CA INDEX NAME)

RN 152459-96-6 CAPLUS

CN Benzamide, 4-methyl-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 152459-98-8 CAPLUS

CN Benzamide, 4-chloro-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 152459-99-9 CAPLUS

CN Benzamide, 2-methoxy-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 152460-05-4 CAPLUS

CN Benzamide, N-[3-methyl-5-[[4-(1-oxido-3-pyridinyl)-2-pyrimidinyl]amino]phenyl]- (9CI) (CA INDEX NAME)

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